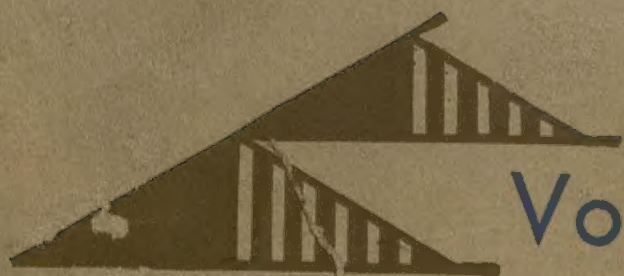


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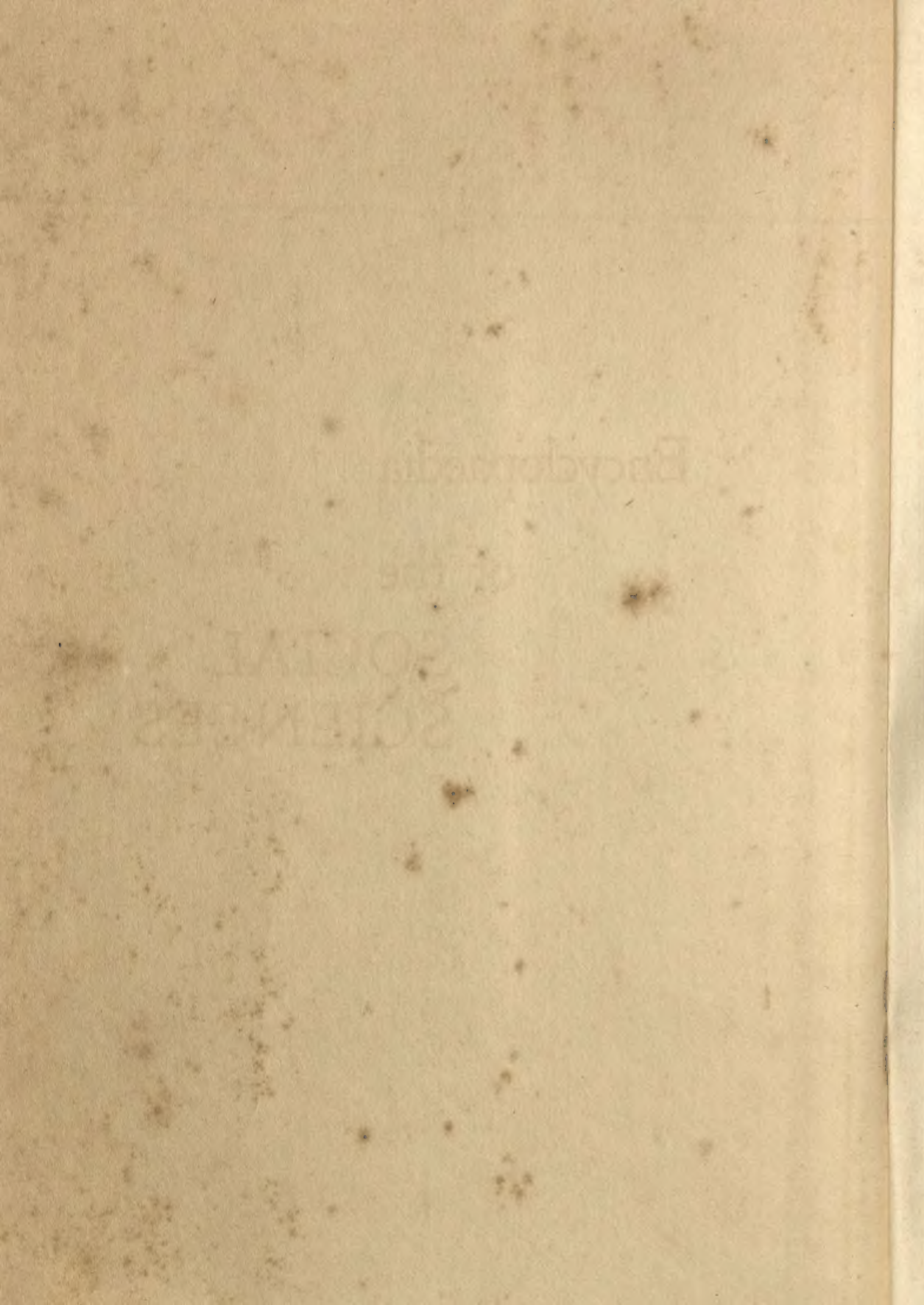
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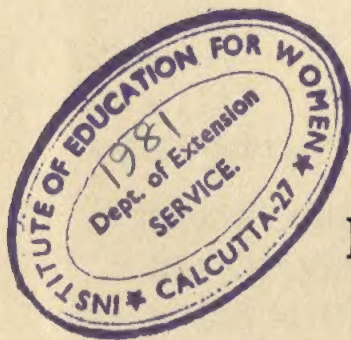
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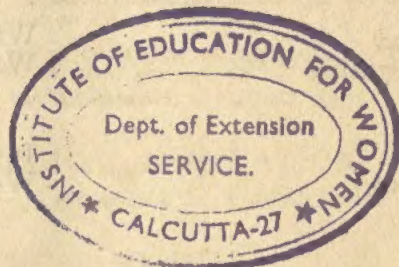
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LABOULAYE, ÉDOUARD RENÉ LEFEBVRE DE (1811-83), French jurist, historian and political theorist. Laboulaye was born in Paris. His early works on the history of landed property, on the civil and political status of women and on criminal law reflect the influence of the historical school of Savigny. In the Revolution of 1848 he sided with the liberal movement, and after the establishment of the empire he launched a publicist campaign against Napoleonic absolutism. But when Napoleon III appeared to liberalize the empire, Laboulaye ceased to oppose it and even voted for the government in the plebiscite of 1870. This action turned many of his faithful friends against him and provoked disorder among his students at the Collège de France. He served under the republic as deputy and senator, an exponent of the more moderate and conservative tendencies.

Laboulaye's political doctrines are mainly derived from de Tocqueville and Constant. He opposed Caesarism and had a sympathetic appreciation of American institutions. He pointed out the danger to individual liberty and human progress of the concentration of power in the hands of the state, a process which, he held, begins with democratic revolutions and ends inevitably in Caesarism. He was not in principle hostile to the state, which he regarded as the greatest human institution, but he wished to circumscribe its powers for fear of its becoming tyrannical. The limits to state power are prescribed by the liberty of the citizens and by the principles of 1789; but constitutions, those "magnificent inscriptions on the front of a temple" from which God is absent, are not sufficient to assure their observance. A liberal education is necessary in order to enable citizens assiduously to exercise their political rights and to participate in the affairs of the commune, department, church and school. The true foe of political despotism must therefore focus attention on the realities of local self-government; he should not allow himself to be deluded by the idea of popular sovereignty, which reduces itself in practise to intermittent and sporadic acts of voting for governmental representatives

and is usually an abdication of the rights of citizenship rather than a true exercise of them.

GUIDO DE RUGGIERO

Works: Juridical: *Histoire du droit de propriété foncière en occident* (Paris 1839); *Recherches sur la condition civile et politique des femmes depuis les romains jusqu'à nos jours* (Paris 1843); *Essai sur les lois criminelles des romains concernant la responsabilité des magistrats* (Paris 1845). Historical: *Histoire politique des États Unis*, 3 vols. (Paris 1855-66, 6th ed. 1876). Politico-social: *Paris en Amérique* (Paris 1863), tr. by M. L. Booth (New York 1863); *La liberté religieuse* (Paris 1858); *Études morales et politiques* (Paris 1862); *L'état et ses limites suivi d'essais politiques sur Alexis de Tocqueville* (Paris 1863); *Le parti libéral* (Paris 1863); *La liberté d'enseignement* (Paris 1880).

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LABOURERS, STATUTES OF. Statutes of Labourers refers to the series of laws enacted from the fourteenth to the sixteenth century by which the English government attempted to control the wages and conditions of labor. The immediate cause of this legislation was the labor shortage resulting from the Black Death, which ravaged England from 1348 to 1350 and which resulted in the death of 30 to 50 percent of the total population and probably an even larger proportion of the working classes. The plague swept the country during the period of transition from the manorial system to a money economy and added to the general economic dislocation characteristic of a transition era. Wages had been rising for a generation and this rise meant a considerable loss to those landholders who had commuted their villeins' services. With the Black Death rents fell, prices and wages soared and the landholding class protested loudly that it was being ruined by the scarcity of workers and their excessive demands.

In 1349 Parliament was not in session because of the epidemic; in order to meet the situation the King's Council proclaimed the Ordinance of

Labourers. Its purpose was to guarantee a steady and adequate supply of labor at wages prevailing before the plague and also to insure reasonable prices for commodities. It provided that all able bodied men and women under sixty without definite means of support must if requested accept service at wages no higher than the rate of 1347. To pay or to receive higher wages was a punishable offense. Workers were not allowed to leave their employers during the term of their contracts and masters were prohibited from retaining employees who had violated this prohibition. No alms were to be given to the able bodied and reasonable prices were to be charged for food. Penalties for violations included fines, forfeit of the excess received and imprisonment.

The ordinance was followed by the statute of 1351, which was intended to supplement it, to remove its ambiguities and to strengthen its administration. It established definite maximum rates for agricultural laborers, provided that they must remain in the summer in the same locality in which they had lived during the winter and that their contracts of service were to be annual or for the customary term. Specific wages were fixed for certain groups of artisans, while for others the rates customary before the plague were to prevail as to both wages and prices. All workers were to take an official oath of compliance with the statute.

The statute and ordinance were frequently reenacted in the next two centuries and although changes were made in details of wage schedules, administration and penalties, their principal features were retained. The most important innovation among the subsequent acts was contained in the statute of 1390 (13 Richard II, c. 8), which instead of reciting fixed maxima took cognizance of variations in local conditions by calling upon the justices of the peace to make annual assessments of wages "according to the Dearth of Victuals." Under this law maximum wages were established in many instances above the statutory maxima of 1388. The principle of fixed maxima was reiterated, without, however, any specific repeal of the wage assessment clause, in the statutes of 1445 (23 Henry VI, c. 12), 1495 (11 Henry VII, c. 22) and 1515 (6 Henry VIII, c. 3). Under the divers acts wage schedules were fixed in money rates varying in each occupation according to whether or not food, lodging and clothing were included; they also varied with the season of the year. These were intended to be maximum rates but under the current pressure of the demand for labor

they probably approximated the lowest wages actually paid. In some of the statutes the minimum number of hours of labor was stipulated and holidays were regulated.

In order to keep workers from migrating to communities where they could obtain better conditions regardless of the law Parliament from time to time tightened the restrictions on freedom of movement; the act of 1388 (12 Richard II, c. 3) provided that no worker could leave his locality or be received in another without the authorization of a letter patent. With the related intention of preventing shifts from lower to higher wage groups provisions were enacted to hinder changes of occupation. By the very nature of the acts combinations of workers to improve their conditions would be legally without status. In addition there was some specific legislation against them; combinations of masons and carpenters were forbidden in 1361 (34 Edw. III, c. 9) and combinations of all workers and of food dealers in 1548 (2 & 3 Edw. VI, c. 15). Although the statutes sometimes lapsed they remained technically binding until 1562, when the Elizabethan Statute of Artificers (5 Eliz., c. 4) set up for the regulation of economic life a new code which synthesized the various principles enunciated in the Statutes of Labourers and adapted them to a somewhat changed situation; this statute affected industrial workers much more than had the earlier laws.

The Elizabethan statute, which for a century was enforced more or less systematically and which was not officially repealed until 1814, was intended to curb economic and social instability by establishing a regular supply of labor in the various occupations, by preventing indigence through compulsory employment and apprenticeship and by restricting the migration of workers. In its provisions for dealing with unemployment and vagrancy, which had developed even in the sixteenth century as a result of the growth of capitalism and the enclosure movement, this act is related to the later Elizabethan poor law. In the interests of steady employment labor contracts with few exceptions were required to run for a year. To offset the enclosure movement a sufficiency of agricultural labor had to be assured; and in addition to the general compulsory labor clauses the statute of 1562 provided for compulsory apprenticeship and compulsory seasonal labor in agriculture. The trade to which a youth was to be apprenticed was determined by his parentage and financial status; these limitations tended to insure an ade-

quate supply of rural workers as well as to fix the general distribution of labor.

The Statute of Artificers, a comprehensive ordering of all the principal relationships between employer and employee, was rendered necessary by the decay of customary and guild regulation. The minimum term of apprenticeship was seven years and could not terminate before the apprentice was twenty-four years old. The wage clause, which reenacted the annual assessment principle of 1389, indicates that the intention of the government was to stabilize wages in a reasonable relation to price rather than to keep them at an absolute low figure.

Any statements concerning the administration of the Statutes of Labourers except for the first ten years after the enactment of the ordinance are highly conjectural, but for that period strenuous efforts were undoubtedly made to enforce them. Their administration was entrusted to local officials and to special commissions appointed for the purpose. From 1349 to March, 1351, there were appointed commissions to enforce both the peace and the ordinance and also separate commissions to enforce the ordinance. The commissions set up between March, 1351, and the end of 1352 were entrusted with the joint task of enforcing the peace and the statutes. An especially strenuous effort at enforcement was made between December, 1352, and 1359, when separate commissions to administer the Statutes of Labourers were established systematically throughout the country. Since many of the justices of laborers also served on the commissions for enforcing the peace, the dual system proved cumbersome; it was abandoned in 1359 and was never revived except for the palatinates. The administration of these statutes thus became part of the task of the justices of the peace; the King's Bench, the Court of Common Pleas and probably the seigniorial courts also had jurisdiction over violations of the statutes.

At first the excesses and later both the fines and excesses collected as penalties under the ordinance and acts were used upon the insistence of Parliament in aid of the king's subsidy on the theory that the violations affected the ability of the landholders to pay the tax. After 1354 the crown recovered its right to all the money penalties; but in 1357 it yielded fines to the lords who were entitled to them under their charters. The salaries of the justices of laborers were derived from the money penalties and varied with the number of sittings. Sometimes additional sums were given to those with an unusually large

number of convictions to their credit. Most of the justices were members of the middle class and thus besides their direct pecuniary interest they had a general interest as members of the employing and taxpaying class in the zealous enforcement of the labor law.

During the first ten years cases were presented under all the clauses, but the fact that the number of presentments for the receipt of excess wages and prices was far greater than the total for all other offenses indicates that the justices of the peace and the justices of laborers concentrated chiefly upon keeping wages and prices low. In the King's Bench and Court of Common Pleas the cases involved almost exclusively questions of contract; excess charges were determined more easily in the local courts and probably for this reason did not come to the upper courts, but indirectly the enforcement of the contract clause had the desired effect of keeping down wage rates and prices. While the justices in the local courts concerned themselves definitely with punishing offending laborers—there were very few convictions of employers—the central courts tried to enforce the law against both classes. Fines and excesses were the most commonly inflicted penalties, and in the cases of illegal wages the former were generally of the same amount as the excesses. The enforcement of the statutes after 1359 was spasmodic rather than continuous and in the fifteenth and still more in the sixteenth century their administration was evidently ineffectual.

The supposition that the statutes were instrumental in destroying villeinage is without foundation, for they gave the lord a preferential right to the services of his villeins and the right to reclaim them from another master if he needed their labor; the obligation to serve a lord was regarded also as a sufficient excuse in actions against laborers for refusal to serve. The manorial lords were thus given the additional instruments of the king's courts to aid in the recapture of fugitive villeins, for which the manorial courts had become inadequate. The statutes were thus to some degree an obstacle to the break up of the manorial system which other factors were helping to effect.

The question of the extent to which the statutes achieved their purpose is still subject to discussion. Wages and prices certainly rose, ultimately to 50 percent above the 1347 level; and the constant complaints of employers, the amounts of the penalties and the number of cases under the statutes as well as their frequent

reenactment with added penalties and new provisions indicate that they fell far short of success. Nevertheless, the periods of strict enforcement must surely have retarded increases in wage rates, particularly among agricultural laborers, and probably in general kept them from rising as high as they would have risen otherwise. From time to time economic pressure forced rises in the statutory maxima themselves; and between about 1445 and 1560, a period of rising prices, the attempt to restrict wages to the maxima of the statutes was frustrated even in the courts. The wage schedules fixed by the justices in some of the towns were above those prescribed by law, for economic competition in the towns probably made even the official recognition of obsolete rates impossible.

In their general spirit and in their specific provisions the Statutes of Labourers presented few innovations and on the whole were entirely consistent with mediaeval economic practise. The establishment of maximum wages by the municipalities and the guilds had been customary since the thirteenth century, so that it was the regulatory authority rather than regulation itself which was new. Nor was economic intervention by the central government without precedent; there had been the Assize of Bread, of Ale and of Cloth. The first two had been administered only by local authorities but the last had been entrusted to alnagers, who like the justices of laborers were national officials appointed to carry out special economic measures. The significance of the statutes in the history of labor legislation is that they represented the first attempt on the part of the national government to regulate the labor conditions throughout the country and that they dealt a blow to free labor by restricting for the first time its freedom of movement. They went beyond any local legislation moreover in fixing the wages of agricultural laborers, which had formerly been subject only to custom.

Intended to protect the consumer in a time of crisis, they nevertheless in their provisions, interpretation and administration reflect the interests of the Parliament of landholders which enacted them. They were administered by members of the same class for the benefit of that class and when rigidly enforced caused much hardship to the worker. They penalized him in that his wages were definitely fixed at obsolete figures while the prices of provision had only to be reasonable; the definite price restrictions on the products of the artificers involved an additional

burden upon those who produced them. Whatever small measure of economic stability was achieved by the statutes was certainly at the cost of the laborer, whose status was lowered at a time when economic forces were conspiring to raise it.

FLORENCE MISHNUN

See: BLACK DEATH; LABOR LEGISLATION AND LAW; LABOR CONTRACT; VAGRANCY; ENTICEMENT OF EMPLOYEES; APPRENTICESHIP; POOR LAWS.

Consult: Lipson, Ephraim, *An Introduction to the Economic History of England*, 3 vols. (4th ed. London 1926-31) vol. i, p. 96-100; Stone, Gilbert, *A History of Labour* (London 1921) p. 55-56, 90-110; Petit-Dutaillis, Charles, and Lefebvre, Georges, *Studies and Notes Supplementary to Stubbs' Constitutional History* (tr. from the French, Manchester 1930) p. 264-71; Holdsworth, W. S., *A History of English Law*, 9 vols. (3rd ed. London 1922-26) vol. ii, p. 459-64, vol. iv, p. 379-87, 390-94; Putnam, B. H., *The Enforcement of the Statutes of Labourers, 1349-1359*, Columbia University, Studies in History, Economics and Public Law, no. 32 (New York 1908), and "Northamptonshire Wage Assessments of 1560 and 1667" in *Economic History Review*, vol. i (1927-28) 124-34; Tawney, R. H., "The Assessment of Wages in England by the Justices of the Peace" in *Vierteiljahrsschrift für Sozial- und Wirtschaftsgeschichte*, vol. xi (1913) 307-37 and 533-64, esp. 307-26; Levett, A. E., and Ballard, A., *The Black Death on the Estates of the See of Winchester*, Oxford Studies in Social and Legal History, vol. v, no. 9 (Oxford 1916) p. 101-04.

LABRA Y CADRANA, RAFAÉL MARIA DE (1841-1919), Spanish statesman, jurist and publicist. Labra was born in Cuba but passed most of his life in Spain. He was a consistent liberal. As writer, educator and parliamentarian he fought in the republican ranks and maintained his democratic convictions unswervingly without falling into the excesses of extreme radicalism. His efforts on behalf of the modernization of Spain have a twofold aspect. First, he sought the country's internal regeneration through education. His liberal ideas proved an obstacle to his appointment to the chair of colonization at the University of Madrid, to which he was entitled by his great knowledge of colonial affairs and of public international law. However, with F. Giner de los Ríos and other illustrious professors who were dismissed from the university because of their liberalism Labra founded the Institución Libre de Enseñanza; in this school, which was destined to play a leading part in the development of Spanish culture, he was at first professor of public international law and then of contemporary political history. He furthered the cause of popular education in the Ateneo de Madrid, where he delivered numerous lectures and of which he was president from 1914 to

1919. In his writings in the field of education he discussed among other things the role of the state. Labra also sought the modernization of Spain with respect to its external affairs. His birth in Havana and the associations of his family with Cuba account for his lifelong interest in colonial questions; for many years he sat in the Cortes for the Antilles. He was very instrumental in bringing about the abolition of Negro slavery in the colonies and fought for ample autonomy for the Antilles as the guaranty of their retention and as an aid to liberalism in the peninsula. Upon the loss of the colonies he accentuated his propaganda on behalf of Ibero-American unity. He may justly be called the father of this movement for close political, juridical, economic and intellectual cooperation with Portugal and Latin America, which, he held, was favored by a common cultural background, by the role Spanish emigrants played in many of the countries under consideration and by other more incidental opportunities, such as the disruption of trade relations caused by the World War. He considered this cooperation necessary because modern conditions made a policy of isolation impossible for a nation and because Spain was entitled, as a result of its history, geographic position, language, social conditions and intellectual advancement, to participate actively in the settlement of international questions. The most important of Labra's voluminous writings are thus those which deal with the history and prospects of the colonial and Ibero-American questions.

JOSÉ OTS Y CAPDEQUI

Important works: *Política y sistemas coloniales*, 2 vols. (Madrid 1876); *Discursos políticos, académicos y forenses*, 2. serie (Madrid 1886); *La autonomía colonial en España* (Madrid 1892); *Cuestiones palpitantes de política, derecho y administración* (Madrid 1897); *Estudios de derecho público* (Madrid 1900); *La reforma política de ultramar* (Madrid 1901); *El problema hispano-americano* (Madrid 1906); *La constitución de Cádiz de 1812* (Madrid 1907); *España y América: 1812-1912* (Madrid 1912); *La política colonial y la revolución española de 1868* (Madrid 1916).

Consult: *El poder de las ideas* (Madrid 1916); Ortiz Fernandez, F., *La reconquista de América* (Paris 1910) p. 57-63.

LABRIOLA, ANTONIO (1843-1904), Italian socialist philosopher. Labriola was professor at the University of Rome from 1874 until his death. Like Socrates he had a passion for oral teaching and conversation, through which he spread a large number of ideas of which only a fraction appears in his essays, addresses, letters

and books. Passing from the influence of Hegel through that of Herbart to that of Marx but always rebelling against enclosing himself within any one system of ideas, he affirmed historical materialism as a pragmatic philosophy and as a theory of the progressive growth of society. He regarded this philosophy as involving a monistic outlook because it is a unified whole of theory and practise and overcomes the abstractions of the theory of historical factors. He sought in economics a guide through history, which he understood as a record of human labor, of the pertinent social relations and of the changes in its forms, which are always social. The movement of history is "from work, which is knowledge in operation, to knowledge as abstract theory"; in history "man develops or produces himself, is at once cause and effect, both author and consequence of definite conditions, in which are engendered also definite currents of ideas . . . beliefs . . . expectations" (ideologies).

Human reality represents a continuous development and a series of rebirths always conditioned by preexisting reality. Men having created for themselves an artificial (social) environment and having gradually modified it create the conditions of their own development and modification. There is a dialectic of history or a self-criticism of things; but the "things" are expressions of social activity. There is no predetermination; progress is not fated. Men themselves must produce the future, and in the process there are always possible regressions, deviations and error. The existence of conditioning factors makes utopias irrelevant. Prevision is possible only as it concerns social forms or morphology and then only through the critical approach of historical materialism. Critical communism is an illustration of this type of analysis. It foresees communism as a "suggestion of a new world being generated" and thus implies a proletarian revolution. Condemning "that which history has already condemned," he based on the progressing socialization of production and the developing proletarian solidarity his prevision of the socialization of the means of production which will abolish the "causes of injustice or the domination of man over man," which will effect cooperation and integral development and which through the increasing productivity of labor will bring about the humanization of all men. Sorel regarded Labriola's essays as a landmark in the history of socialism. As the first professor of philosophy in a European university to expound historical materialism Labriola raised

the prestige of revolutionary socialism in intellectual circles. In addition his emphasis on the practical and activistic implications of the doctrine helped make Marxist views more acceptable to the syndicalists of the Latin countries.

RODOLFO MONDOLFO

Important works: *La dottrina di Socrate, secondo Senofonte, Platone ed Aristotile* (Naples 1871; new ed. by Benedetto Croce, Bari 1909); *Morale e religione* (Naples 1873); *Della libertà morale* (Naples 1873); *Dell'insegnamento della storia* (Rome 1876); *Scritti vari di filosofia e di politica*, collected by Benedetto Croce (Bari 1906). His *Saggi intorno alla concezione materialistica della storia* is composed of four volumes: *In memoria del manifesto dei comunisti* (Rome 1895, 3rd ed. 1902); *Del materialismo storico* (Rome 1896, 2nd ed. 1902); *Discorrendo di socialismo e di filosofia* (Rome 1898, 2nd ed. 1902); *Da un secolo all'altro*, ed. by L. Dal Pane (Bologna 1925). *In memoria . . . and Del materialismo . . .*, tr. by C. H. Kerr as *Essays on the Materialistic Conception of History* (Chicago 1904), and *Discorrendo . . .*, tr. by E. Untermann as *Socialism and Philosophy* (Chicago 1907). Labriola's letters to Engels were published in part by L. Dal Pane in *Nuova rivista storica*, vol. xi (1927) 371-76, 613-16, and vol. xii (1928) 198-203, and in part in Russian translation by D. Ryazanov in *Pod znamenem marxizma* (1924) no. 1, p. 41-80.

Consult: Torre, A., "Le idee filosofiche di Antonio Labriola" in *Rivista italiana di sociologia*, vol. x (1906) 278-93; Fiorilli, C., in *Nuova antologia*, 5th ser., vol. cxxii (1906) 59-63; Orano, P., *I moderni*, 5 vols. (Milan 1914-26) vol. ii, p. 1-53; Croce, Benedetto, "Note sulla letteratura . . ." in *Critica*, vol. v (1907) 417-35; Diambri-Palazzi, S., *Il pensiero filosofico di Antonio Labriola* (Bologna 1923); Mondolfo, R., *La filosofia politica in Italia nel secolo XIX* (Padua 1924) p. 76-82; Ryazanov, D., "K pis'mam Labriola" in *Pod znamenem marxizma* (1924) no. i, p. 35-40; Dal Pane, L., "La teoria dell'epigenesi nel pensiero di Antonio Labriola" in *Critica sociale*, vol. xxxv (1925) 109-12, and a polemic with Corrado Barbagallo on "La prevedibilità storica secondo Marx e Antonio Labriola" in *Nuova rivista storica*, vol. x (1926) 586-89, and vol. xi (1927) 617-20; Vorländer, K., *Kant und Marx* (2nd ed. Tübingen 1926); Untermann, E., "Antonio Labriola and Joseph Dietzgen" in his translation of Labriola's *Discorrendo . . .*, p. 223-60.

LACOMBE, PAUL (1834-1919), French historian and social philosopher. Influenced by Comte and John Stuart Mill, Lacombe was led to an appreciation of the importance of the social factors in the development of history. In his principal work, *De l'histoire considérée comme science* (Paris 1894, 2nd ed. 1930), he undertook to show how the ambition of the philosophers of history may be realized on a scientific basis. He maintained that institutions are more important than events and that the role of the former in the social sciences is similar to that of repetition and similarity in the natural sciences. The concept of

the institution was bound up in his mind with the notion of a "general man" as opposed to the temporary and individual man. His plan to make a systematic study of the different categories of the institutional was accomplished only in fragments (*Introduction à l'histoire littéraire*, Paris 1898; *La guerre et l'homme*, Paris 1900; *L'appropriation du sol*, Paris 1912), but he succeeded in rounding out his theoretical work by a criticism of Taine's ideas (*La psychologie des individus et des sociétés chez Taine*, Paris 1906; *Taine, historien et sociologue*, Paris 1909). Although he relapsed for a while into the "event" point of view (*La première commune révolutionnaire de Paris et des assemblées nationales*, Paris 1911), he soon saw his mistake and reverted to the "science" of history. The notes he left for the second edition of his great work bear witness to an understanding of the importance of the social and of ideas in historical explanation, a view closely resembling that of historical synthesis. Greatly concerned with the practical, he wrote considerably on political and economic organization and on the problems of education.

Lacombe's importance lies in the fact that he stressed the concept of the institution in the study of history. Although he formulated this notion in a vague fashion, it led him to see the connection between history and sociology. Lacombe should also be credited with having taken account of the importance of the economic factor although he probably exaggerated it, a point which he illustrated with some interesting contributions to the study of *Homo faber*.

HENRI BERR

Consult: Berr, Henri, "Paul Lacombe, l'homme et l'oeuvre" in *Revue de synthèse historique*, vol. xxx (1920) 97-143; *La sociologie*, comp. by D. Essertier, *Philosophes et savants français du XIX^e siècle*, vol. v (Paris 1930) p. 386-94.

LACORDAIRE, JEAN BAPTISTE HENRI DOMINIQUE (1802-61), French preacher and liberal Catholic leader. Lacordaire was originally educated for the law but was converted to a religious career by reading Lamennais' *Essai sur l'indifférence* (1817-23). At the time of his ordination in 1827 he became Lamennais' ardent disciple; he joined with him in the editorship of the short lived *Avenir*, and although formally bowing to the papal condemnation which suppressed the paper he never abandoned the essentials of the liberal Catholic position. With Montalembert and other friends he toiled for years in a vain endeavor to bring the mass of his

fellow Catholics to this point of view. He hailed the new order which the events of 1848 seemed to usher in and welcomed the second French Republic, but Napoleon III's restoration of the imperial system and its whole hearted acceptance by the leaders of the church drove him out of public life. He spent the remaining ten years of his career as principal of a small secondary school belonging to the Dominican order, whose reestablishment in France had been one of his great ambitions.

Lacordaire will be remembered primarily as one of the little band who endeavored vainly to reconcile the doctrines and policy of Catholicism with those of modern political liberalism. Against those Catholics who demanded for the church in France a freedom from state interference, especially in matters of education, which the Napoleonic concordat and the Restoration settlement denied it but who refused to allow equal freedom to non-Catholic individuals and groups he maintained that Christianity has no need for absolute power; for truth, however persecuted, has always triumphed over error, however protected and powerful. The church must, in other words, be prepared to grant the freedom it claims. In terms of concrete policy this involved a cleavage between the church and the authoritarian political parties, which had hitherto been its chief supporters, and the recognition of liberty as the basic principle of society—neither of which the church was prepared to accept.

ROGER SOLTAU

Works: Oeuvres complètes, 9 vols. (new ed. Paris 1872-73); *Political and Social Philosophy of Lacordaire*, ed. by D. O'Mahony (London 1924); *Thoughts and Teachings of Lacordaire* (new ed. London 1911).

Consult: Foisset, J. T., Vie du R. P. Lacordaire, 2 vols. (2nd ed. Paris 1873); Chocarne, B., *Le R. P. H. D. Lacordaire, . . . sa vie intime et religieuse*, 2 vols. (4th ed. Paris 1873), English translation ed. by J. A. Aylward (London 1867); Montalembert, C. F. de T. de, *Le père Lacordaire* (2nd ed. Paris 1862); Haussenville, G. P. O. d', *Lacordaire* (4th ed. Paris 1911); Favre, Julien, *Lacordaire, orateur* (Fribourg 1906); Gurian, Waldemar, *Die politischen und sozialen Ideen des französischen Katholizismus, 1789-1914* (M.-Gladbach 1929).

LADD, GEORGE TRUMBULL (1842-1921), American psychologist. Ladd was educated for the ministry, receiving degrees in divinity from Andover Theological Seminary and Western Reserve University. After serving as Congregational minister for ten years he transferred his interests to philosophy and later to psychology.

In psychology his importance lies in the hospitality he showed to the doctrines of experimental psychology as newly expounded in Germany by Wundt. Along with G. Stanley Hall and William James he may be regarded as a pioneer in the movement which established psychology as a scientific experimental discipline in the United States and which after a generation gave a place of leadership to American psychologists.

While professor of philosophy at Yale he published his *Elements of Physiological Psychology* (New York 1887), a work which marked the first attempt in English to present the results of the "new" psychology. The fact that Ladd came to psychology by way of theology and philosophy makes the scope and adequacy of this pioneering compilation a tribute to his skill and devotion as well as to his liberality of view. In those days a scientific psychology was feared as an encroachment upon the moralistic prestige and integrity of the "soul" in the hierarchy of human endowment. The championship of the newer movement by a representative of orthodox philosophy served to quiet this fear and supported the efforts of Hall and James to give psychology a status independent of philosophy. Ladd revised the *Elements* in 1911 in association with R. S. Woodworth, bringing the subject to an authoritative presentation for that time.

It was at Ladd's instigation that Scripture was appointed professor of psychology at Yale in 1892, founding there one of the early and productive psychological laboratories.

Ladd's catholicity of interest appears in the wide range of his more than thirty volumes, particularly in his writings on oriental subjects. He lectured in Japan and in India. His sympathetic understanding of the Japanese led to the erection in 1922 of a monument in his honor at a Buddhist temple in Tokyo.

JOSEPH JASTROW

Important works: Philosophy of Knowledge (New York 1897); *Essays on the Higher Education* (New York 1899); *Philosophy of Conduct* (New York 1902); *The Philosophy of Religion*, 2 vols. (New York 1905); *In Korea with Marquis Ito* (New York 1908).

Consult: Armstrong, A. C., in Philosophical Review, vol. xxx (1921) 639-40; Boring, Edwin G., *A History of Experimental Psychology* (New York 1929) p. 511-15; Pillsbury, Walter Bowers, *The History of Psychology* (New York 1929) p. 245-46.

LADD, WILLIAM (1778-1841), American pacifist and philanthropist. Ladd contributed significantly to both the organization and the theory of the early American peace movement.

After a career as a sea captain and a financially disastrous experiment with free labor in Florida, which he had hoped would lead to the peaceful abolition of slavery, he devoted his efforts to the cause of international peace, giving his fortune and his health to the cause and dying literally a martyr to it. He founded new peace societies, edited periodicals and devoted a forceful pen and a persuasive voice to propaganda. His contributions to the technique of pacifism lay in his development of the use of the petition and the delegation to legislative and executive officers; in his practical plans for enlisting the aid of press and pulpit and of women as well as men; and in his unification of the scattered peace societies into a national organization, the American Peace Society, in 1828.

Although he was a deeply religious man, Ladd's pacifism was more constructive and realistic than that of his predecessors in the nineteenth century peace movement. His book, *An Essay on a Congress of Nations* (London 1840; reprinted with introduction by James B. Scott, New York 1916), proposed a concrete and systematic plan for international organization. Not only did this plan influence many writers on the subject but its most important features were realized in the Hague conferences, the World Court and the League of Nations. It involved the establishment of a periodic congress of nations for formulating international law and for guiding and administering the general welfare of nations and an independent but correlated permanent international court for the settlement of differences by diplomatic arbitration or by judicial decision. It was original and essentially American in emphasizing the separation of powers and judicial supremacy as well as reliance on public opinion rather than force to make its decisions effective. It represented a sharp departure from most previous plans of the sort in that it was intended primarily to establish peace and not to preserve the status quo or to guarantee the stability of thrones; it proposed a league of nations, not of sovereigns.

MERLE E. CURTI

Consult: Hemmenway, John, *The Apostle of Peace, Memoir of William Ladd* (Boston 1872); Curti, M. E., *The American Peace Crusade 1815-1860*, vol. i- (Durham, N. C. 1929-); Call, A. D., *Advocate of Peace*, vol. lxxxix (1927) 608-11, with exhaustive bibliography.

LAFARGUE, PAUL (1842-1911), French socialist. Lafargue, who was born in Cuba, studied in Paris during the Second Empire. First a re-

publican, he later became a disciple of Proudhon and a collaborator on Longuet's *Rive gauche*. He went to London to complete his medical studies and became associated with Karl Marx, whose youngest daughter, Laura, he married. Lafargue served as secretary for Spain in the general council of the First International. He sympathized with the Paris Commune and upon its defeat fled to Spain, where he was active in the socialists' struggle against Bakuninist anarchism. After the amnesty of 1880 he returned to France and became with Jules Guesde one of the principal figures in the socialist renaissance in France and a founder of the *Parti ouvrier français*. Lafargue was the best propagandist in France of the theories of Marx and Engels, both through the translation with his wife's collaboration of their works and through his own studies in economics, history and philosophy. In addition he was an able pamphleteer and contributed many important articles to *Égalité*, *Revue socialiste*, *Citoyen*, *Cri du peuple*, *Petite république*, *Petit sou*, *Socialiste*, *Ère nouvelle*, *Devenir social*, *Humanité* and *Neue Zeit*. In 1883 he and Guesde with the aid of Marx wrote *Le programme du parti ouvrier*. Lafargue participated in the congresses of the Labor party, the later United Socialist party and in those of the Second International. He was imprisoned both in 1883 and in 1891 for his revolutionary activity. Lafargue had considerable influence on the social democracy of Germany and Russia, and Lenin frequently referred to his works. He and his wife committed suicide, feeling they had outlived their usefulness.

BORIS SOUVARINE

Important works: *La propriété; origine et évolution* (Paris 1895); *Les trusts américains* (Paris 1903); *Le déterminisme économique de Karl Marx* (Paris 1909); *Le droit à la paresse* (Paris 1883); *Cours d'économie sociale* (1884); *La religion du capital* (Paris 1887), English translation (London 1894); *Le communisme et l'évolution économique* (Lille 1892; 3rd ed., n.p. 1892); *Programme agricole du parti ouvrier français* (Lille 1894); *Idéalisme et matérialisme dans la conception de l'histoire* (n.p. 1895), controversy with Jaurès; *La fonction économique de la bourse* (Paris 1897); *Le socialisme et les intellectuels* (Paris 1900), tr. by C. H. Kerr (Chicago 1900); *Le socialisme et la conquête des pouvoirs publics* (Lille 1899); *La question de la femme* (Paris 1904); *Causes de la croyance en Dieu* (Paris 1905); *La charité chrétienne* (Paris 1905); *La méthode historique de Karl Marx* (Paris 1907); *Le patriotisme de la bourgeoisie* (Paris 1906).

Consult: Vérecque, Charles, *Dictionnaire du socialisme* (Paris 1911) p. 232-37; Ryazanov, D., preface to his Russian edition of Lafargue's *Sochineniya*, vol. 7 (Moscow 1925-)

LAFAYETTE, MARQUIS DE, MARIE-JOSEPH-PAUL YVES-ROCH-GILBERT DU MOTIER, (1757-1834), French military and political leader. Lafayette distinguished himself by his military exploits in the continental army of the United States, notably in his campaigns against Cornwallis in Virginia in 1781. But his chief importance was as a liaison between the French and American armies and governments. Having acquired a reputation as a champion of liberty he became a leader of the liberal cause in France, opposing restrictions on trade—particularly with America—and advocating Negro emancipation and popular representation in government. At the beginning of the French Revolution he championed reform and was largely responsible for the Declaration of Rights in 1789. His preservation of order as commander of the Paris National Guard won him enthusiastic middle class support and the half hearted confidence of the king. Until 1791 he was the dominant figure in French politics. Soon, however, Louis began to distrust him and to engage in counter-revolutionary activities. At the same time Lafayette began to lose his popularity with the revolutionary forces by insisting that the royal prerogative must not be further diminished. In the Paris mayoralty campaign of 1791 he was defeated. When war was declared against Austria in 1792, Lafayette, although holding a military command at the front, vehemently attacked the Girondin antimonarchical policy and upon the suspension of the king was obliged to desert. Returning to France after seven years of German prison and exile, he discreetly but openly opposed Bonaparte, whose rule he considered antiliberal. In retirement at Chateau Lagrange he engaged in scientific agriculture, particularly in sheep breeding. During the Hundred Days he was elected to the Chamber and moved the resolutions demanding Napoleon's abdication. Under the Restoration he engaged in intrigues not merely against the Bourbons—both in the Chamber and secretly—but also on behalf of Greek, Spanish, Latin American, Polish, Belgian and Italian revolutionaries. In the revolution of 1830 he was chosen leader of the popular party at the Hôtel de Ville, but being liberal monarchist rather than republican he yielded to Orleanist persuasion and accepted Louis Philippe with a revised charter. He soon became dissatisfied with the bourgeois monarchy and died a leader of the opposition.

LOUIS GOTTSCHALK

Consult: Jackson, S. W., *LaFayette, a Bibliography*

(New York 1930); *Mémoires, correspondance et manuscrits du général Lafayette*, ed. by F. de Corcelle, 6 vols. (Paris 1837-38); Doniol, Henri, *Histoire de la participation de la France à l'établissement des États Unis d'Amérique*, 5 vols. and supplement (Paris 1886-99); Tower, Charlemagne, *The Marquis de La Fayette in the American Revolution*, 2 vols. (2nd ed. Philadelphia 1901); Charavay, Étienne, *Le général La Fayette (1757-1834)* (Paris 1898).

LAFERRIÈRE, ÉDOUARD LOUIS JULIEN (1841-1901), French jurist. The son of a prominent authority on administrative law, Laferrière began the practise of law in 1864 in Paris. He entered the Conseil d'État at the beginning of the Third Republic; in 1879 he became president of the judicial section (*section du contentieux*) and in 1886 vice president of the Conseil d'État, acting in fact as president, since the latter title was reserved to the minister of justice. Appointed in 1898 governor general of Algeria, he introduced or prepared several important political and economic reforms. He was procurator general at the Court of Cassation in 1900-01.

Laferrière exercised considerable influence on the evolution and progress of French administrative law, which is in large measure judge made, by both his activity in the supreme administrative tribunal and his masterly *Traité de la juridiction administrative et des recours contentieux* (2 vols., Paris 1887-88; 2nd ed. 1895). This work, which was the result of a course of lectures delivered in 1883 before the Faculté de Droit de Paris, marks an important event in the history of French administrative law. Instead of expounding the detail of the regulations or of their application in practise he attempted for the first time to discover the principles which at that time and largely under his influence inspired the jurisprudence of the Conseil d'État and to make of them a scientific synthesis.

Some of the ideas advocated by Laferrière have been fully accepted; for example, the residual jurisdictional authority of the Conseil d'État in administrative lawsuits and the specificity of the rules concerning the responsibility of the administration. Others have been discarded—the division of administrative acts into acts of authority or public power sovereign in character and acts of management, the irresponsibility of the state on the occasion of the exercise of the public power—while certain of his ideas have been widely attacked, such as the independence of the active administration with regard even to the administrative tribunals.

CHARLES EISENMANN

LAFFEMAS, BARTHÉLEMY DE (1545-c. 1611), French economic and social reformer. Laffemas was born in Dauphiné of a family of impoverished Calvinist nobility. Having adopted the vocation of *tailleur* he was engaged sometime around 1566 by Henry of Navarre, whose continued favor after his coronation as Henry IV of France gave Laffemas an opportunity to become a prosperous merchant. The commercial experience Laffemas thus gained inspired him to write a number of tracts, twenty-three in all, sketching a program for the economic and social reform of the nation. Although these reveal their author's lack of scientific training, their basis in direct observation gives them a decidedly practical quality and often results in striking ingenuity in matters of detail. In opposition to the agrarian doctrines of his friend Sully, Laffemas upheld an industrialist policy. He assumed that the quantity of gold and silver, provided it was in active circulation, was an infallible index of a nation's wealth. But the drain of money into other countries was to be prevented, according to his view, not by prohibiting its exportation but by stimulating the manufacture of more and better goods to the point where foreign nations would be forced to buy in France. In his program for the reorganization of national industry were included the development of the cultivation of the mulberry tree with a view to increasing silk production, the creation of new factories, bans upon the export of raw material and the extension of government protection to industry. On its social side Laffemas' plan envisaged the creation of an autonomous industrial class which should have high powers to control the laboring energy of the nation in the interests of industrial aggrandizement. He proposed toward this end the strict enforcement of the edict of 1581, which had expanded the system of *jurandes*; the establishment of bureaus of manufactures in each diocese endowed with police jurisdiction and the right to settle industrial conflicts; and the creation of workhouses for habitual idlers. Henry IV manifested respect for Laffemas' ideas by appointing him controller general of commerce in 1602 and so far followed his advice as to reissue the edict of 1581 in 1597 and to found a council of commerce and manufactures in 1601. In spite of these measures Laffemas' social program was doomed to oblivion because it conflicted with the royal conception of centralization. The economic and mercantilistic aspects of his system also failed to produce a significant effect at the time. But in their essentials they were later re-

vived by Montchrétien and eventually translated into legal fact by Colbert.

PAUL HARSIN

Consult: Cole, C. W., *French Mercantilist Doctrine before Colbert* (New York 1931) ch. ii; Hayem, Fernand, *Un tailleur d'Henri IV: Barthélemy de Laffemas* (Paris 1905), which lists Laffemas' tracts; Laffitte, P., "Notice sur B. Laffemas" in *Journal des économistes*, vol. xlii (1876) 181-218; Hauser, Henri, "Le système social de Barthélemy de Laffemas" in *Revue bourguignonne*, vol. xii (1902) 113-31, and "La liberté du commerce et la liberté du travail sous Henri IV" in *Revue historique*, vol. lxxx (1902) 257-300; Fagniez, G., *Économie sociale de la France sous Henri IV* (Paris 1897), especially p. 88-134; Levasseur, Émile, *Histoire des classes ouvrières et de l'industrie en France avant 1789*, 2 vols. (2nd ed. Paris 1900-01), especially vol. ii, p. 153-67.

LAFITAU, JOSEPH-FRANÇOIS (1681-1746), Jesuit missionary and ethnologist. From 1712 to 1717 Lafitau was stationed at the Iroquois mission of Sault Saint Louis, now Caughnawaga. His chief work, *Moeurs des sauvages américains, comparées aux mœurs des premiers temps* (2 vols., Paris 1724), is one of the best and fullest first hand studies available on the magico-religious, political and domestic culture of the Iroquois and Hurons; it contains orderly and objective descriptions by a sympathetic, informed and balanced observer. Lafitau formulated and applied principles which have since become basic in ethnology. Primitive cultures, he insisted, should be judged in the light of the conditions under which they operate rather than in terms of European cultures. The resemblances between cultures or traits found among different peoples or in different periods may be generic or specific; he believed that only from specific identities can genetic relationship be inferred. Contemporary primitive cultures throw light upon the cultures of ancient peoples and vice versa. Lafitau's own applications of these principles are usually reserved and sober, although not always correct. Recognition of Lafitau's contribution to comparative ethnology came in 1913 from van Gennep and Wilhelm Schmidt.

JOHN M. COOPER

Consult: Rochemonteix, C. de, *Les jésuites et la Nouvelle-France au XVII^e siècle*, 3 vols. (Paris 1895-96) vol. iii, p. 384-86; McLennan, J. F., *Studies in Ancient History* (new ed. London 1886) p. 305-09; Gennep, A. van, "Contributions à l'histoire de la méthode ethnographique" in *Revue de l'histoire des religions*, vol. lxvii (1913) 320-38; Pinard de la Boullaye, H., *L'étude comparée des religions*, 2 vols. (3rd rev. ed. Paris 1929) p. 196-98.

LA FOLLETTE, ROBERT MARION (1855-1925), American statesman. La Follette was born in the region of agrarian discontent which has been a perennial ferment in American political life, and he became its outstanding spokesman. Early egalitarian beliefs deriving from rural pioneer life were intensified by the moralistic and oratorical education he received at Wisconsin's frontier university, and factors in his intimate environment—the early death of his father, a tyrannical stepfather, an imperious elder brother, a long struggle against near poverty—cast him permanently in the mold of agitator and critic. He served as governor of his state from 1900 to 1906 and from 1906 until his death as United States senator. Although a member of the Republican party throughout his career he was not in the confidence of party leaders, and Wisconsin Republicanism under him was a pronounced heresy from the viewpoint of the national organization. The rift between him and the Republican leadership widened steadily after 1908, leading eventually to his independent candidacy for the office of president in 1924. In this campaign he temporarily united agriculture and labor in an energetic protest against the conservative policies of the two major parties, receiving the support of such widely divergent organizations as the agricultural Non-Partisan League, the American Federation of Labor and the Socialist party.

His major political ideas, the democratization of electoral devices and the control of industry by government, were the fruition of this heritage. They represented Populist faith in the wisdom of the people tempered by a zeal for knowledge and expertness in public office. His struggle for the regulation of capital and industry embodied, however, none of the seductive nostrums of the radical agrarianism of his time. He led in the development of the direct primary and championed the initiative, referendum and recall. He worked out a plan for regulation of "big business" based on appointive commissions with wide regulative authority, actual valuation as a rate base for public utilities, a sharply graduated income tax, government monopoly of the banking system and the prohibition of trusts and monopolies by legislative fiat. His attitude toward trusts and monopolies revealed, even as late as 1924 when he ran for the presidency on an independent ticket, that he had not bridged the gap between the hopes of an agrarian democracy and the facts of an industrial society. His chief work was to transform Wisconsin into a

political laboratory for advanced measures and to devise such national legislation as the Seaman's Act and the provision for railroad valuation as a basis for the fixing of rates.

In political method La Follette was productive and ingenious. As substitutes for party organization and the legislative caucus he used weapons either long in desuetude or as yet undeveloped. The most significant of these were a direct and continuous appeal to the electorate upon questions of policy, the executive message and veto to compel legislative agreement, the invention of the "roll call on men and measures"—in which he read the records of public officials to their constituents from his campaign rostrums—and, in the United States Senate, the development of the concept of the legislative tribune as a forum for public criticism. As a minority voice exposing to public attention the informal and hidden processes of government he added clarity and substance to political discussion. Essentially a realist in politics, La Follette used many familiar devices of politicians, developing in his struggle for control of Wisconsin a powerful political machine which he used skillfully throughout his career.

WALLACE S. SAYRE

Works: *La Follette's Autobiography: a Personal Narrative of Political Experiences* (Madison 1913); *The Political Philosophy of Robert M. La Follette*, compiled by Ellen Torelle and others (Madison 1920).

Consult: Barton, A. O., *La Follette's Winning of Wisconsin (1894-1904)* (Madison 1922); Lovestone, Jay, *The La Follette Illusion* (Chicago 1924).

LAFONTAINE, SIR LOUIS HIPPOLYTE (1807-64), French Canadian statesman. From 1830 to 1837 LaFontaine was a member of the assembly of Lower Canada. He supported the demand for self-government in a legal manner and opposed the rebellion of 1837. From 1841 to 1851 he was the acknowledged leader of the French Canadian Reformers in the assembly of the United Province of Canada. He determined to avoid the suppression of French Canadian nationality contemplated by the union of Upper and Lower Canada in 1841, and with Robert Baldwin he led a ministry in 1842-43 and another from 1848 to 1851, each of which contributed to the establishment of the principle of responsible cabinet government for colonies. In 1849 he introduced and carried a bill designed to compensate the French Canadians for undeserved losses in the rebellion. The Tories made the measure a question of loyalty; but if

the governor general had refused his assent or if the British government had disallowed the bill, the theory on which the ministry had taken office would have proved farcical and meaningless. Through the fierce legislative debates, through the subsequent rioting and through the discussions in England LaFontaine stood firm. The bill passed into law and thus vindicated forever the Baldwin-LaFontaine theory of colonial government. From 1853 to 1864 LaFontaine was chief justice of Lower Canada. As a legislator and as a judge he earned respect for his contributions to the development of French Canadian law and for his study of its history.

W. P. M. KENNEDY

Consult: DeCelles, A., *LaFontaine et son temps* (Montreal 1907); Leacock, Stephen, *Mackenzie, Baldwin, LaFontaine, Hincks*, ed. by W. P. M. Kennedy, *Makers of Canada series*, vol. v (Oxford 1926); David, L. O., *Biographies et portraits* (Montreal 1876); Kennedy, W. P. M., *Lord Elgin*, *Makers of Canada series*, vol. vi (Oxford 1926); Dent, J. C., *The Canadian Portrait Gallery*, 4 vols. (Toronto 1880-81) vol. iii, p. 104-08.

LAFUENTE Y ZAMALLOA, MODESTO (1806-66), Spanish historian and publicist. Lafuente prepared for an ecclesiastical career but was never ordained. He joined the advanced liberals, or *progresistas*, whose views he propounded in his journals *Fray Gerundio* (1837-44) and *Revista europea* (1848-49), publishing biting satires against everything he considered reactionary in politics and custom and winning enormous but ephemeral popularity. Lafuente's great work is his monumental history of Spain, which he carried to the death of Ferdinand VII in 1833; it was continued by Valera, Borrego and Piralá to the death of Alfonso XII in 1885 and later by Coroleu and Maura Gamazo to 1902. Writing from the standpoint of moderate liberalism Lafuente managed generally to preserve a tone of impartiality, although he did insert subjective appraisals together with rather pompous paragraphs. The broadening of concepts, the opening of new fields of study and other changes in historiography have antiquated the work in some respects; it is largely political in content, its sections dealing with primitive and Moslem Spain are now of little use and many of its statements regarding other periods require partial correction. On the whole, however, his history, preeminent in its breadth of treatment and solidity of content, its conscientious and judicious examination of sources and its literary qualities, has not yet been equaled and its dis-

cussions of modern and contemporary periods are far from obsolete. It is still the most widely read history of Spain.

JOSÉ DELEITO Y PIÑUELA

Works: *Historia general de España*, 30 vols. (Madrid 1850-59); *Viajes por Francia, Bélgica, Holanda y orillas del Rin*, 2 vols. (Madrid 1842-43); *Teatro social del siglo XIX*, 2 vols. (Madrid 1846); *Viaje aerostático de Fray Gerundio* (Madrid 1847); *La cuestión religiosa* (Madrid 1855); *Fray Gerundio, Obras escogidas* (Madrid 1874).

Consult: Ferrer del Río, A., "El Señor Don Modesto Lafuente, su vida y sus escritos" in Lafuente's *Historia general*, vol. xxx, p. i-clix.

LAG, CULTURAL. *See* CHANGE, SOCIAL

LAGARDE, PAUL DE (1827-91), German orientalist and publicist. Lagarde, whose original name was Bötticher, was the son of a Berlin school teacher. He studied theology, taught in various secondary schools and in 1869 became professor of oriental languages at the University of Göttingen.

In addition to his work as an orientalist Lagarde took an active part as a publicist in the discussion of current political and national problems. The concept of German nationalism as developed in his *Deutsche Schriften* (2 vols., Göttingen 1878-81; new ed. by K. A. and Paul Fischer with title *Schriften für das deutsche Volk*, 2 vols., Munich 1924) has considerably influenced the German nationalist currents of the late nineteenth and the early twentieth century and has been incorporated to a great extent in the ideology of the National Socialist movement, in the youth movement of Germany and in some of the educational reform movements. An admirer of Jacob Grimm and F. Rückert, Lagarde was steeped in romanticism and adopted its individualistic-aristocratic outlook and its glorification of the past. He wished to restore the religion and national spirit of the Germans by a return to the old indigenous sources. The historical development of Germany—with its reception of Roman law, its Protestant revolt, Enlightenment, emancipation of the Jews, liberalism, plutocracy, urbanization, parliamentarism and party struggles—Lagarde considered as a process of de-Germanization. Culture and education have replaced religion, and sectarian divisions have taken the place of national religious unity. As Paul and Augustine were destroyers of the true Christian, so were Luther, Hegel and Bismarck destroyers of the true German spirit. Mass education in secondary schools and the universal

quest for a liberal education through indiscriminate assimilation of subject matter, which is unorganic and hence un-German, has brought about the standardization of individualities.

The reconstruction of Germany, Lagarde held, can take place only through the return to the genuinely Christian, old German piety and morals. In the sphere of religion his reform program meant the elimination of all Semitic and Roman elements and the formation of a national German religion, a doctrine later propagated by Ludendorff and the National Socialists. Demanding that politics be made thoroughly ethical he struggled against Bismarck and sought to cultivate the heroic virtues and to ground society in the army, the people and the professions rather than in the intelligentsia. He urged the replacement of parliament by a chamber of specialists and advocated eastern colonization, reagrarization and the regeneration of the conservatives. His educational aims were based also on Fichte's romantic concept that the essence of the German was something entirely individual and original and that this individuality was eternal and divine. In order that this individuality may be developed uniformly, authoritarianism, compulsory public education and worship of the state must disappear and schools must be made organic; in other words, religious and vocational.

HERMANN PLATZ

Consult: Lagarde, Anna de, *Paul de Lagarde, Erinnerungen aus seinem Leben* (Göttingen 1894); Schemann, Ludwig, *Paul de Lagarde* (2nd ed. Leipsic 1920); Breiting, Richard, *Paul de Lagarde und der gross-deutsche Gedanke* (Vienna 1927); Mommsen, Wilhelm, *Paul de Lagarde als Politiker*, Göttingen Beiträge zur deutschen Kulturgeschichte (Göttingen 1927); Klamroth, Kurt, *Staat und Nation bei Paul de Lagarde: ein Beitrag zur Geschichte der politischen Ideenlehre im 19. Jahrhundert*, Universität Göttingen, Rechts- und Staatswissenschaftliche Fakultät, Abhandlungen, vol. viii (Leipsic 1928); Hollmann, Rudolf, *Lagarde als Pädagoge*, Pädagogisches Magazin, no. 602 (Langensalza 1915); Platz, Hermann, "Paul de Lagardes romantische Flucht ins Altgermanische" in his *Grossstadt und Menschentum* (Munich 1924) ch. v.

LAINÉ, ARMAND (1841-1908), French jurist. Lainé was unquestionably one of the creators of modern private international law. He was the first incumbent of the chair devoted to the subject at the University of Paris, where he taught from 1881 to 1908. Lainé's chief work is the *Introduction au droit international privé* (2 vols., Paris 1888-92), a historical study of the conflict of laws from the fourteenth to the eighteenth

century which remains unexcelled to the present day. Of his many special studies the most celebrated, *La théorie du renvoi en droit international* (Paris 1909), is devoted to the famous theory of *renvoi*, which he steadfastly opposed. He believed that only confusion would arise from taking into consideration the rules of the conflicts of laws in a foreign country when the law of the forum prescribed the application of foreign law. In the light of history he demonstrated further the optional character of the rule *locus regit actum* and made a profound study of the rules of the *Code civil* relating to the conflict of laws (*Étude critique d'un projet de convention concernant la solution des conflits de lois*, Paris 1902). In his general doctrine Lainé is to be associated with the school of Savigny. His greatest contribution was his liberation and clarification of a subject which he taught with apostolic fervor at a time when it was generally neglected. With Renault, Lainé was one of the most influential delegates to the conferences on private international law at The Hague.

J. P. NIBOYET

Consult: Pillet, Antoine, "L'oeuvre de M. Lainé" in *Revue de droit international privé*, vol. v (1909) 1-11.

LAISSEZ FAIRE. Any attempt to write a historical account of the doctrine of laissez faire would involve traversing the history of orthodox economic theories, at least from the time of the French physiocrats to the middle of the nineteenth century. For classical economic theory, as it developed especially in Great Britain under the influence of Adam Smith, is with respect to the province of government based on the underlying assumption of laissez faire, that the economic affairs of society will in the main take care of themselves if neither the state nor any other body armed with coercive authority attempts to interfere with their working as determined by the individual actions of men. This assumption depends in turn on an optimistic view of the nature of the universe and on the conception of a "natural order" or system of economic harmonies which will prevail and work out to mankind's advantage in the absence of positive regulation.

It is impossible in a brief space to give more than a very general indication of the stages by which this doctrine rose for a time to a position of almost undisputed prominence among economic writers. Although the idea of laissez faire can be traced back to the earlier Italian economists, as, for example, Serra in the seventeenth century, the maxim itself—*laissez faire, laissez*

passer—derives from eighteenth century France and has been commonly attributed to Gournay, at first a merchant and later one of the intendants of commerce and a friend of Turgot. Turgot, however, in his *Éloge de Vincent de Gournay*, ascribes the phrase *laissez nous faire* to another merchant, Legendre, who is said to have used it in impressing upon Colbert the desire on the part of the mercantile community for non-interference by the state. The expression *laissez faire* has been sometimes ascribed also to d'Argenson. But it seems clear that Gournay even if he did not originate it amplified and popularized it in the longer form, *laissez faire, laissez passer*; and in the latter part of the eighteenth century it became in varying form a common expression among the physiocratic writers and those akin to them in thought. Adam Smith adopted from the physiocrats the underlying idea, although not the phrase, which did not become widely current in England until J. S. Mill used it in the title of one of the sections of his *Principles of Political Economy* (1848). Since then it has come to be identified most closely with the doctrines of the Manchester school in England, especially with the opposition to extended state intervention in industry through such measures as factory acts or acts regulating wages, and also in the sphere of commercial policy with free trade. The word Cobdenism is often used in England as practically equivalent to *laissez faire*.

In its immediate setting the doctrine of *laissez faire* as formulated by the physiocrats was primarily a protest against the vexatious system of regulations encompassing industry instituted by Colbert in the previous century; but in a deeper sense it was the outcome of the view that inasmuch as manufacture and commerce are unproductive of wealth and only serve as means of distributing it they should be left to take their own course free from taxation—which should be levied only on the productive forces of the land. This arrangement seemed to the physiocrats to accord with the dictates of the natural order, a concept which Adam Smith developed into the clearly formulated doctrine of a natural harmony under which the individual in pursuing his own economic interests mysteriously furthers the interests of the whole. This doctrine was closely connected in Smith's mind with the assumption that money coming into the hands of the state by way of taxation is likely to be spent unproductively and not in such a way as to further economic enterprise. It is significant that Smith's treatment of the problem of taxation and public

debt takes no account of the possibility admitted by even the most individualistic of modern economic writers that money in the hands of the state may be put to productive use. Obsessed by the vision of a mounting national debt and by a dread of the restrictive tendencies of state intervention in his own day, he failed to realize the possibility of productive state expenditure.

According to Smith's highly individualistic economic theory the source of wealth for the nation lies in the efforts made by individuals in their use of the factors of production—land, labor and capital—at their disposal and in their success in producing utilities under the inducement of a prospect of economic reward. Despite the fact that in the case of certain individuals this pursuit may be unenlightened, it is nevertheless axiomatic, according to Smith, that individuals acting independently are likely to be better judges than any collective body as to the means of producing the maximum amount of wealth. Collective management, except in industries that can be reduced to a simple and fixed routine, is deplored by Smith as conducive to sluggishness and lack of enterprise; hence his distrust of the joint stock company as a form of industrial organization. The individual, on the other hand, in pursuit of his own gain will strive to produce as much utility as possible and whether as employer or as workman will be driven by competition to do this as a condition of survival and success in business. The sum of the efforts of all the individuals to create the greatest possible amount of wealth will result, if they are allowed to follow their own bents, in the creation of the maximum wealth in society as a whole. This will happen because of the existence of a natural order, in which the interests of the individuals are harmonized with the good of society; and interference with the free working of this natural order although it may be justified in exceptional cases on non-economic grounds, as in the case of the navigation laws, is bound to diminish the total amount of wealth produced. Thus all forms of state intervention for the purpose of regulating commerce so as to produce either an influx of the precious metals or a "favorable balance of trade" are bound to diminish the total wealth of the world by diverting trade from the channels along which it would "naturally" flow into others which individuals, left to their own devices, would reject as less productive.

This conception of a natural order and a natural harmony, based on what human nature will

cause men to do if they are left alone, pervades and underlies not only Adam Smith's writings but those of all the classical economists of the late eighteenth and the early nineteenth century. It received moreover a powerful philosophic reinforcement from the teaching of the utilitarians. For the doctrine which erects pleasure as the end of human action and makes each man the only competent judge of his own pleasure fits in exactly with the notion that each man is the best judge of his own economic interest. Man pursues his economic interest as a means to pleasure; and as pleasure is regarded as quantitative and the pleasure of society is merely the sum of the individual pleasures of its members, that course which furthers most these individual pleasures must lead to the creating of the maximum of social utility. Benthamism was to be turned to very different uses at a later stage; but in the England of the early nineteenth century it became the powerful philosophic ally of laissez faire doctrines in the economic field. The economic good of society became, like the pleasure or happiness of society, simply the sum of the goods accruing to the individual members of society.

Adam Smith and his successors up to J. S. Mill based the theory of value mainly upon a consideration of the forces and factors of production. Value is conceived of as determined by the quantity of labor or of labor, capital and land embodied in a commodity or by the money cost of producing it—its "price of production," in Mill's phrase. This view of the value creating process placed the emphasis on the rewards meted out to the factors of production, which are regarded as inducements to produce as much as possible. These rewards, however, consist fundamentally not in money but in the goods which money will buy; and from the time of Stanley Jevons the emphasis of the theory of value shifts from the side of production or supply to that of demand. Jevons repudiated Adam Smith's distinction between "value in use" and "value in exchange" and measured the value of goods not by the cost of production or the amount of labor incorporated in them but primarily by their "utility"; i.e. their capacity to yield pleasure or satisfaction to the consumer. Production thus came to be thought of as a response to the economic stimulus of consumers' demand, and consumers' demand as an inducement to the producer to supply those goods which will yield the maximum total of satisfaction.

Under the new theories of value formulated in England by Jevons and on the continent primarily by the Austrian school of Menger, Wieser and Böhm-Bawerk the doctrine of laissez faire acquired a new sanction. Free consumers' demand regarded as the force governing supply in the absence of artificial restrictions was treated as the guaranty of maximum production of wealth and satisfaction; and state intervention came to be looked on as bad because it interfered with the free expression of consumers' demand by altering the conditions of supply and price. It is in these terms, vitally different from those of Smith or Ricardo, that the doctrine of laissez faire is at present justified, if at all. Emphasis is put no longer on the self-interest of each producer as making for the maximum production of economic values but rather on the assurance given by the free play of consumers' demand that the production of goods and services will be such as to create the maximum total of human satisfaction.

Economists who now hold laissez faire doctrines state the case mainly on this ground, urging the necessity for allowing free play to consumers' demand as a means to securing maximum utility in preference to attempts by the state or any other body, such as a combine, to fix or influence the prices of commodities or of services, such as labor. Only in popular economics does the argument that each purchaser by seeking his own advantage is most likely to promote the advantage of society as a whole still play any considerable part. In popular economics this argument is still prevalent, but it would be difficult to find much sanction for it in modern economic theory.

The conception of the "order of nature" and the "natural economic harmony," so dear to Bastiat and the free traders of the mid-nineteenth century, thus assumes a new form. But it remains essentially Benthamite or rather utilitarian. For its basis now is the view that the consumer is the best judge of his own satisfactions and that these are measured under conditions of laissez faire by the prices which he is prepared to offer for the various goods offered for sale. Bentham's calculus of pleasures as well as his doctrine that "pushpin is as good as poetry" finds economic expression in the price offers of the consuming public. Satisfaction is measured simply by price; or at all events economics is concerned only with satisfactions that can be measured in those terms.

As Marshall and many other economists have

pointed out, however, the case for *laissez faire* presented in this form cannot stand examination. For the consumers' price offers depend not only on the amount of satisfaction expected from what they buy but also on the size of their incomes. If incomes are unequal it cannot be said that equal price offers represent measurements of equal satisfaction; and there is no reason to suppose that a system which relies exclusively on the free play of consumers' demand will result in the maximum total satisfaction. Bentham's other principle, the greatest happiness of the greatest number, can be successfully invoked against any such deduction. For the greatest happiness might be promoted by a different distribution of wealth resulting in a quite different series of price offers by the consumers.

Thus in one of its aspects the case for *laissez faire* breaks down; and the utilitarian principle becomes an argument for state intervention designed to lessen the inequalities of income in order to promote the maximum of satisfaction. This constitutes the argument against *laissez faire* as regards state regulation of wages through minimum wage legislation and the use of taxation to bring about a redistribution of incomes. Moreover the same Benthamite argument of greatest happiness provides a case for factory and similar legislation designed to remove the causes of unhappiness which arise out of a system of "free" contract between employer and employee.

But it can still be argued that even if the state ought in the interest of the greatest happiness of the greatest number to interfere with the distribution of incomes, it ought not to interfere with the pricing of commodities; since each consumer is the best judge of what he wants, and given a satisfactory distribution of income the free play of consumers' demand will lead to the production of the maximum utility. Almost no one, however, would push this principle to the extreme point; for it will be agreed that the state can reasonably tax certain kinds of luxuries, especially those, such as alcoholic liquors, which are harmful if consumed to excess, and may provide or insure the possession of certain commodities, such as water, at a specially low price when it desires for social reasons to increase the consumption of them. Nevertheless, such instances may be regarded as exceptional and it may be held that by and large consumers' demand should be given free play in order that its price demands may stimulate the maximum production of satisfactions. In the international field

this supposition is at the root of the familiar case for free trade. Tariffs, it is argued, constitute an arbitrary interference with the free play of consumers' demand and tend for this reason to reduce the total of satisfactions. Free trade is indeed a logical corollary to the doctrine which makes consumers' demand the final arbiter of prices and production.

This view of the working of the price system is hardly consistent, however, with modern economic conditions. Price fixing under a system of increasing combination among producers has become more and more a function of production rather than of demand. The producer must indeed work within conditions set by consumers' demand; but the demand instead of fixing the price determines only what quantities can be sold at any given price level. The producers more and more fix the prices, either directly or by adjusting the quantity of goods placed on the market. They can of course do this only where some degree of formal or informal combination exists among them; but such combination has become so common as to be the rule rather than the exception.

The *laissez faire* doctrine was originally opposed not only to state intervention but also to combination designed to influence prices on the ground that this too must tend to decrease the total utility produced. But the efforts of its advocates to prevent combination through anti-trust legislation and by regulation of monopolies have either failed or resulted in a negation of *laissez faire* by calling for extensive intervention on the part of the state. Combination among producers cannot be prevented but at most only regulated. Preventive measures fail, and regulative measures result in an abandonment of *laissez faire*. Combination has therefore to be accepted by modern advocates of *laissez faire* as part of the system of private enterprise; and *laissez faire* comes to mean not the absence of combination but the fullest freedom of action for it. The price system if not regulated by the state comes to be regulated not by consumers' demand as a single force but by the producers acting within the limits set by consumers' demand. But prices fixed in this way can no longer be regarded as part of the order of nature or as having an inherent tendency to promote the maximum satisfaction.

At this point also the case for *laissez faire* breaks down in face of the transformation of the modern capitalist system from unregulated to regulated production. The tendency in modern

industry is not only toward a tariff policy based on conceptions of economic nationalism but also toward the building up both nationally and across national frontiers of large industrial units strong enough to exert a considerable measure of control over prices and output—thereby creating a new case for state intervention. The German cartel system and the measures taken by the state to control cartel prices furnish a good example of this tendency. The large scale organization and the necessity for state control which it involves lead in the direction of socialism; and the opponents of socialism, unable to rest the case for *laissez faire* on the old ground of consumers' freedom, are inclined to slip back to the older contention that *laissez faire* leads to efficiency in production and is the only means of providing producers with a sufficient incentive to do their best. Emphasis is no longer thrown on the pre-established harmony which causes the pursuit by each individual of his own self-interest to result in the well being of all; but it is argued that unless each man is left free to profit by his own exertions, free from state interference, there will be no incentive strong enough to stimulate an adequate development of the world's productive resources. This argument is most commonly advanced against socialism; that is, against any system under which industry would be publicly owned and conducted without recourse to the profit incentive. But it is also often used as a reason for keeping at a minimum state interference with privately run industry and against any heavy taxation of profits for the purpose of redistributing incomes.

But in effect under conditions of large scale industrialism, especially in the older countries, the actual conduct of productive enterprise passes more and more into the hands of salaried managers and the incentive of profit operates directly not upon the productive process but rather upon the investment of capital. The case for *laissez faire* thus comes to be largely a case for stimulating investment by allowing an adequate profit incentive to the stockholder or shareholder. Stated thus it provokes the socialist answer that if capital belonged to the community and the process of investment were accordingly socialized the incentive of profit would become unnecessary. The advocates of private enterprise and *laissez faire* retort that under such conditions only a dead level of mediocrity would at best be secured and that both the rewards of enterprise and the penalties of laziness and inefficiency are indispensable if production is to be

carried on properly. To this the socialist replies that a communal system would appeal to new motives of service and create a new corporate spirit in favor of doing one's best, which would be more than sufficient to replace the dying incentives of pecuniary gain and fear of unemployment.

The argument thus often becomes at this point an argument about human nature. But it is at bottom a question not so much of human nature as of the forms of organization and control that are appropriate to the technical powers of production available for man's use. The doctrine of *laissez faire* grew up and flourished in the nineteenth century, first, as a reaction against old systems of state and guild regulation that had become obstructive and oppressive as a result of the changing methods of production; and, secondly, as the outcome of a feeling that these powers would be most rapidly and thoroughly developed if individuals were left as free as possible to make use of them. The sufferings provoked by this unleashing of capitalist enterprise speedily led to the development of a new system of state regulation through factory acts and the like as well as to the growth of social legislation designed to correct in some degree the inequalities of income. But for some time these new forms of state interference remained external to the actual conduct of industry, merely laying down conditions to which private enterprise had to conform.

In the latter part of the nineteenth century, however, private enterprise underwent a radical change as a result of the advance of the new technical revolution. The growth in the scale of business organization was weakening the economic power of the consumer, whereas the growth of democracy was adding to his political power. This situation led inevitably to a demand that political power should be applied to positive economic ends—which was precisely what the advocates of *laissez faire* had been above all else concerned to deny. Cobden and Bright of course wanted to use the power of democracy for economic ends; but they thought of these ends as negative and not positive, as the removal of hindrances to the free working of the economic system and not as the assumption of control over it by the political power. But in practise this limitation could not be sustained when once economic power became organized and appeared no longer as a natural force but as a conscious control by the organizers of production. Modern large scale industrialism irretrievably destroyed

the theoretical basis of laissez faire doctrine as well as its political practicability.

But laissez faire, discounted as a doctrine and unworkable as a policy in any modern state, has still a powerful following. Except among socialists it is retained as a major premise, however many exceptions may be admitted; and each exception has to be justified by positive arguments against a strong body of opinion that even today regards state intervention in industry as in some sense "unnatural" and undesirable on a priori grounds. Nor is this surprising; for laissez faire established itself firmly as the basis of nineteenth century industrialism, and all the forces of economic conservatism are therefore now ranged on its side, as they were once on the side of the old regulative system which the physiocrats, Adam Smith and Bentham set out to discredit and destroy. Theoretically bankrupt, because the very forms of modern industrial organization are a denial of its first premises, it still fights everywhere a vigorous rearguard action. Its prestige and vitality, however, were seriously undermined by the World War, which caused a great increase both in the degree and extent of combination among producers and in the amount of state regulation of industry and left behind it a situation which compelled states to perpetuate their interference; moreover by promoting the growth of nationalism the war fostered the conception of a national industry closely linked up with the national state. This conception is as prominent in the national idea of Fascism in Italy as in Russian Communism; and it is at the back of the many projects of national planning which, largely under Russian influence, are now being put forward all over the world.

The separation between economics and politics, on which the doctrine of laissez faire rested, is an anachronism in the present day world. The use of political power for economic ends is universal; and although this does not settle the question whether socialism or capitalism is the better system it does make it impossible to rest the case for capitalism on the doctrine of laissez faire. For laissez faire is essentially a doctrine of individualism and free competition. But capitalism cannot be individualistic today and has long ceased to extol unregulated competition as an ideal. As a prejudice laissez faire survives and still wields great power; as a doctrine deserving of theoretical respect it is dead.

G. D. H. COLE

See: INTRODUCTION, section on THE RISE OF LIBERALISM; ECONOMICS: UTILITARIANISM; LIBERALISM; IN-

DIVIDUALISM; CAPITALISM; COMPETITION; FREE TRADE; FREEDOM OF CONTRACT; CONTROL, SOCIAL; GOVERNMENT REGULATION OF INDUSTRY; COLLECTIVISM; NATIONAL ECONOMIC PLANNING; COMBINATIONS, INDUSTRIAL; MONOPOLY.

Consult: Oncken, A., *Die Maxime laissez faire et laissez passer, ihr Ursprung, ihr Werden*, Berner Beiträge zur Geschichte der Nationalökonomie, no. ii (Berne 1886); Hasbach, W., *Die allgemeinen philosophischen Grundlagen der von François Quesnay und Adam Smith begründeten politischen Ökonomie* (Leipzig 1890), and *Untersuchungen über Adam Smith und die Entwicklung der politischen Ökonomie* (Leipzig 1891); Bauer, S., "Origine utopique et métaphorique de la théorie du 'laissez faire' et de l'équilibre naturel" in *Revue d'économie politique*, vol. xlv (1931) 1589-1602; Larkin, P., *Property in the Eighteenth Century with Special Reference to England and Locke* (Dublin 1930); Weulersse, G., *Le mouvement physiocratique en France (de 1756 à 1770)*, 2 vols. (Paris 1910), and *Les physiocrates* (Paris 1931); Veblen, T., "The Preconceptions of Economic Science" in his *The Place of Science in Modern Civilization* (New York 1919) p. 82-179; Clark, J. M., "Adam Smith" in Becker, C. L., Clark, J. M., and Dodd, W. E., *Spirit of '76 and Other Essays* (Washington 1927) p. 59-98; Viner, J., "Adam Smith and Laissez-faire," and Palyi, M., "The Introduction of Adam Smith on the Continent" in Clark, J. M., and others, *Adam Smith 1776-1926* (Chicago 1928) chs. v and vii; Lourié, B., *Das Verhältnis der Manchester-Richtung zur klassischen Nationalökonomie* (Berne 1924); Hertz, G. B., *The Manchester Politician 1750-1912* (London 1912); Hasek, C. W., *The Introduction of Adam Smith's Doctrines into Germany*, Columbia University, Studies in History, Economics and Public Law, no. 261 (New York 1925); Cahnmann, W., *Der ökonomische Pessimismus und das Ricardosche System* (Halberstadt 1929); Keynes, J. M., *The End of Laissez-Faire* (London 1926); Ritchie, D. G., *The Principles of State Interference* (3rd ed. London 1902); Hobson, J. A., *Free-thought in the Social Sciences* (London 1926) pt. ii; Parsons, Talcott, "Wants and Activities in Marshall," and "Economics and Sociology, Marshall in Relation to the Thought of His Time" in *Quarterly Journal of Economics*, vol. xlv (1931-32) 101-40, 316-47; Jevons, W. S., *The State in Relation to Labour* (4th ed. by F. W. Hirst, London 1910); Veblen, T., *The Theory of Business Enterprise* (New York 1904); Tawney, R. H., *The Acquisitive Society* (New York 1920); Webb, S. and B., *The Decay of Capitalist Civilization* (London 1923); Commons, J. R., *The Legal Foundations of Capitalism* (New York 1924); Clark, J. M., *Social Control of Business* (Chicago 1926); Meakin, W., *The New Industrial Revolution* (London 1928); Spann, O., *Tote und lebendige Wissenschaft* (2nd ed. Jena 1925); Mises, L. von, *Kritik des Interventionismus* (Jena 1929); Soule, G. H., *A Planned Society* (New York 1932); Chase, Stuart, *A New Deal* (New York 1932) chs. ii-iii.

LAJPAT RAI, LALA (1865-1928), Indian nationalist and social reformer. Lajpat Rai studied law at Lahore and practised in the Punjab before he entered politics. He was deported in 1907 for

preaching dominion status for India. From 1914 to 1919 he lived in America. From 1919 until 1928 he was editor of the *People*, a Lahore weekly. He died as a result of a stroke following a clash with police at a demonstration.

Despairing of English liberalism as a way to national liberation and stimulated by the example of Japan, the younger generation of middle class Indian intellectuals early in the twentieth century began to stress complaints against the moral and economic aspects of British domination. Lajpat Rai belonged to the group which raised the banner of the new nationalism. In the Indian National Congress of 1905 he preached the will to assert; Indians were to become "arbiters of their own destiny." He advocated swadeshi, the development of Indian industry, social reform and the popular and Indianized education. The national genius of India was to blossom in its own right after decades of domination by foreign educational ideals. This nationalism had a strong religious tinge. Looking toward the people, their past, their beliefs and sufferings, Lajpat Rai became a leader of the Arya Samaj, which founded an educational system saturated with the spirit of the *Vedas* and the *Upanishads*. As candidate of the New Nationalism party ("Extremists") for the presidency of the Indian National Congress in 1907 Lajpat Rai was defeated by the moderates. His party seceded from the Congress, rejoining it only after the end of the World War when Lajpat Rai became president of the Extraordinary Session at Calcutta in September, 1920. In his later years he supported the Gandhist movement.

HANS KOHN

Important works: *The Arya Samaj* (London 1915); *Young India: an Interpretation and a History of the Nationalist Movement from Within* (New York 1916, 2nd ed. 1917); *England's Debt to India* (New York 1917); *The Political Future of India* (New York 1919); *The Evolution of Japan and Other Papers* (Calcutta 1918); *The Problem of National Education in India* (London 1920); *The Agony of the Punjab* (Madras 1920); *India's Will to Freedom* (Madras 1921); *Unhappy India* (Calcutta 1928, rev. ed. 1928).

Consult: Gupta, N., "Lala Lajpat Rai" in *Modern Review*, vol. xlv (1928) 735-40; *Lala Lajpat Rai: a Sketch of His Life and Career* (Madras 1920).

LAMARCK, CHEVALIER DE, JEAN BAPTISTE DE MONET (1744-1829), French naturalist. Originally trained as a botanist, Lamarck was appointed late in life to the chair of invertebrate zoology established in connection with the reorganization of the national Museum of Natural History during the French Revolution. To this

vast and uncharted field, which he had never before studied, Lamarck devoted himself with great enthusiasm, publishing as a result of his researches a number of systematic works on invertebrate animals and an evolutionary account of the origin of biological forms.

Until about 1799 Lamarck believed in the fixity of species. He was converted to the conception of evolution by the force of two ideas involving, first, a perception of the continuity of all forms of life; and, second, an appreciation of the tremendous historical changes which had taken place in the physical environment of plant and animal life. The sense of morphological continuity made him view the various invertebrate organisms as representing progressive simplifications or degradations of the complex mammalian type and also made him look for a junction point between the plant and animal series. On the other hand, his recognition of the historical changes in the natural environment, coupled with the realization that all the conditions necessary for the carrying on of life are already present in the most simple and undifferentiated organisms, led him to inquire whether the morphological continuity of forms was not seconded by a historical continuity, or actual evolution of the complex forms from a primitive monad through the stimulus of the environment. Lamarck felt that it would be absurd to attribute to the physical environment any direct transforming action on the forms of species, but he insisted that great changes in environment necessarily result in changes in the needs of the organisms and that these changes in needs translate themselves into changes of behavior. Thus, Lamarck contended, certain parts or organs are exercised more and others less, with the result that structural changes become fixed in the adult organism by a process of organic habit which he likened to but regarded as distinct from ordinary psychological habit. This process Lamarck designated as the first law of the evolution of species, the law of use and disuse. With it he joined a necessary second law, that the results of use and disuse when long continued and shared by both sexes are inherited and passed on cumulatively.

Lamarck's theories did not receive acceptance during his lifetime, largely because of the opposition of Cuvier, who used his influence to discredit them in favor of his own doctrine of the immutability of species and successive new creations after repeated geological catastrophes. Their importance was recognized only after Darwin had converted the scientific world to a

belief in evolution by his own theory, which put its main emphasis on natural selection but which also took into consideration Lamarckian factors. Weismann's polemic against the inheritance of acquired characters and his attempt to purify Darwinism into a simple doctrine of natural selection had the paradoxical result of provoking a return to Lamarck on the part of many scientists; these continue to accept the Lamarckian doctrine despite the lack of definite evidence to prove or to disprove its central thesis.

In its bearing on sociology the Lamarckian theory has sometimes been interpreted inaccurately as implying the inheritance of mental training. A closer connection between Lamarckianism and sociological theory has often been asserted by idealistic philosophers in the parallel which they draw between Lamarckian biological evolution and mental or cultural evolution: in both cases, they hold, development takes place not mechanistically but through an immanent force solicited by external circumstances.

BENJAMIN GINZBURG

Important works: *Système des animaux sans vertèbres* (Paris 1801); *Histoire naturelle des animaux sans vertèbres*, 7 vols. (Paris 1815-22; new ed. by G. H. Deshayes and H. Milne-Edwards, 11 vols., 1835-45), partial translation as *An Epitome of Lamarck's Arrangement of Testaceae* (London 1823); *Philosophie zoologique* (Paris 1809; new ed. with introduction by C. Martins, 2 vols., 1873), tr. by H. Elliot (London 1914); *Système analytique des connaissances positives de l'homme* (Paris 1820).

Consult: Landrieu, Marcel, *Lamarck, le fondateur du transformisme*, Société Zoologique de France, Mémoires, 1908, vol. xxi (Paris 1909), containing a complete bibliography both of Lamarck's writings and works about him; Packard, A. S., *Lamarck, the Founder of Evolution* (New York 1901); Perrier, Edmond, *Lamarck* (Paris 1925); Rádl, Emmanuel, *Geschichte der biologischen Theorien in der Neuzeit*, 2 vols. (Leipzig 1905-09; vol. i, 2nd ed. 1913), tr. by E. J. Hatfield (London 1930); Le Roy, É., *L'exigence idéaliste et le fait de l'évolution* (Paris 1927).

LAMARTINE, ALPHONSE MARIE LOUIS DE PRAT DE (1790-1869), French poet and statesman. Lamartine came of a wealthy, noble, royalist and Catholic family. He first achieved fame with the publication of his *Méditations poétiques* (Paris 1820; new ed., 2 vols., 1922), which gained him immediate recognition as a great romantic poet. Without entirely deserting his muse he became intensely interested in public affairs and in 1833 was elected to parliament as a "broad and moderate royalist." He refused to identify himself with any party in the Chamber and, as he said, sat "on the ceiling" and

spoke "through the windows" to the nation without. France was amazed and captivated by the idealistic and sentimental orations with which the poet in politics "caressed the ears" of his auditors. A violent opponent of the government of Louis Philippe, he became more and more democratic as he became more and more popular. In 1847 he published his famous *Histoire des girondins* (8 vols. Paris, 4th ed. 4 vols. 1848; tr. by H. T. Ryde, 3 vols., London 1847-48), the title of which is belied by the author's egregious disregard of scholarship but which as an eloquent pamphlet glorifying the Girondins as the true champions of the ideas of the French Revolution created such a furor that it became an important factor in the situation leading to the February Revolution of 1848. When that event occurred, Lamartine became a member of the Provisional Government and the leading representative of the bourgeois republicans. The emergence of the practical problems of establishing a new government and of meeting the crisis brought on by the uprising of the working men during the June days accomplished the speedy ruin of the popular orator. As candidate for president of the Second Republic in 1848 Lamartine received no more than a few thousand votes.

Lamartine's significance as a public man lies mainly in the fact that he typified the idealistic, liberal bourgeois of 1848. His views are to be found chiefly in his pamphlet *Politique rationnelle* (Paris 1831; English translation 2nd ed. London 1848) and in a collection of his speeches in parliament, *La France parlementaire* (6 vols., Paris 1864-65). He advocated policies that would result in "moral equality and human dignity." These included political democracy, a free press, universal education and separation of church and state. The last policy he favored not from an anticlerical standpoint, but because he shared the view held by Lamennais, whom he resembled in his general Christian democratic outlook, that the church could better pursue its divine mission when freed from political entanglements. Social reforms, he thought, must take into consideration the sanctity of private property—"the only foundation which God has given to His family and to society"; and those which he proposed were humanitarian in nature, such as the abolition of capital punishment and of slavery. In a hazy way he envisaged a social reform party that would convert conservatives to reforms and radicals to moderation. For this reason he is sometimes regarded as the inspirer of the French

Radical Socialists, the "bourgeois party with a popular soul."

As a writer, although his publications were voluminous and varied, Lamartine's distinction comes solely from his poetry. But even the fame which the *Méditations poétiques* and *Jocelyn* (2 vols., Paris 1836; tr. by F. H. Jobert, Paris 1837) brought him is now slowly declining, as it becomes recognized that he lacked the vigor and originality of a great romantic poet.

J. SALWYN SCHAPIRO

Works: *Oeuvres de Lamartine*, 7 vols. (Paris 1862-68); *Correspondance de Lamartine*, 6 vols. (Paris 1873-75; 2nd ed., 4 vols., 1881-82).

Consult: Quentin-Bauchart, Pierre, *Lamartine, homme politique* (Paris 1903); Deschanel, É., *Lamartine*, 2 vols. (4th ed. Paris 1901); Barthou, Louis, *Lamartine, orateur* (Paris 1916); Whitehouse, H. R., *The Life of Lamartine*, 2 vols. (Boston 1918); Schapiro, J. S., in *Political Science Quarterly*, vol. xxxiv (1919) 632-43; Lebey, André, *Lamartine dans ses horizons* (Paris 1929); Guérin, D., "Les idées sociales de Lamartine" in *Revue des sciences politiques*, vol. xlvii (1924) 396-414.

LAMAS, ANDRÉS (1817-91), Uruguayan statesman, publicist and historian. Lamas was born in Montevideo, but as he spent a large part of his life as an exile or diplomat in Brazil and Argentina his statesmanship, diplomacy and journalistic activity are identified with southeastern South America as a whole. Through this activity he helped free the La Plata region from the dominance of the dictatorship set up by Juan Manuel Rosas in Argentina. He also propagandized the South American brand of Saint-Simonism, the principles of which he was influenced to adopt not only by the numerous refugees from the regime of Louis Philippe who had made Montevideo a Saint-Simonian center but by the contacts he established in the course of his struggle against Rosas. In Montevideo he encountered and cooperated with José Esteban Antonio Echeverría, Juan María Gutiérrez, Juan Bautista Alberdi and their fellow exiles who had attempted to adapt the principles of the school to Argentina. He also cooperated with and shared the ideology of the Brazilian Baron Irineo Evangelista de Sousa de Mauá, who financed the war which caused the downfall of Rosas. Mauá, who became the greatest South American financier of his day, was a Saint-Simonian of the practical school influenced by Michel Chevalier, which looked upon industrial development as the instrument of social betterment. Lamas' writings, however, affected as they are by the struggle with Rosas in the first period of his life and by

later incidental circumstances, do not display a consistent Saint-Simonian philosophy. Moreover as their author was a typical representative of the universalism of the South American intelligentsia, they cover many fields but seldom reach a high level of scholarship, although some of them are highly stimulating. His attempt to account for the peculiarities of the history of Latin America largely in the light of the conditions of its discovery and conquest are of less importance than some of his other works. He has enjoyed some distinction as an economist; to the colonial provincialism or *americanismo criollo* of Rosas he opposed Europeanization, the attraction of foreigners and foreign capital and industrialization. He held that the imitation of the conservative English banking methods was unsuited to young countries, and he presented eclectic theories of money and credit. For the solution of the agrarian problem he advocated Rivadavia's scheme of emphyteusis, which, he held, would assure the cultivation of the land because the state retained its ownership and which would moreover give society through a single tax the benefit of the land values that it created.

J. F. NORMANO

Important works: *Apuntes históricos sobre las agresiones del dictador argentino D. Juan Manuel Rosas* (Montevideo 1849); *Juan Díaz de Solís, descubridor del Río de la Plata* (Buenos Aires 1871); *Biografía de D. Joaquín Suárez* (Montevideo 1881); *D. Bernardino Rivadavia, libro del primer centenario de su natalicio*, by Lamas and others (Buenos Aires 1882), partially reprinted as *Rivadavia, su obra política y cultural* (Buenos Aires 1915), and as *La obra económica de Bernardino Rivadavia* (Buenos Aires 1917); *Noticia histórica sobre la república oriental del Uruguay* (Montevideo 1849); *Estudio histórico y científico del banco de la provincia de Buenos Aires* (Buenos Aires 1886); *El génesis de la revolución e independencia de la América española* (Buenos Aires 1891); Introduction to his edition of Lozano, Pedro, *Historia de la conquista del Paraguay*, 5 vols. (Buenos Aires 1873-75) vol. i, p. i-cxlviii.

Consult: Roxlo, Carlos, *Historia crítica de la literatura uruguaya*, 7 vols. (Montevideo 1912-16) vols. i-ii; Farla, Alberto de, *Mauá: Irenêo Evangelista de Souza Barão e Visconde de Mauá 1813-1889* (Rio de Janeiro 1926); Coni, E. A., "La legislación agraria de Rivadavia según Andrés Lamas" in *Revista argentina de ciencias políticas*, vol. xvii (1918-19) 162-80, 304-23.

LAMBARDE, WILLIAM (or Lambard), (1536-1601), English jurist and antiquarian. Lambarde was admitted as a student to Lincoln's Inn in 1556, elected a bencher there in 1579 and appointed a justice of the peace in the same year. He is best known for his *Eirenarcha* (London

1581, rev. ed. 1610), a book on the office of the justices of the peace. It was first published in 1581 and twelve editions or reprints between that year and 1619 testified to its popularity. The functionaries of whom he wrote had by the end of the sixteenth century become extremely important factors in the working of local administration, whether on the purely executive or on the judicial side. Hence there was already a fair amount of literature in existence for their guidance and Lambarde freely confessed his debt to the anonymous *Boke of Justyces of Peas*, thirty-two editions and reprints of which appeared between 1506 and 1580, to Sir Anthony Fitzherbert's book on the justices of the peace and to a then unprinted tract by Thomas Marowe. What made his *Eirenarcha* so acceptable was not merely his incorporation of the recent statutes and case law affecting justices of the peace but the clarity of his exposition and the easiness of his style, which compared favorably with the crabbed technicality or the jejune severity of his predecessors.

Other works of his were the *Archaionomia* (London 1568), a paraphrase of Anglo-Saxon laws, of which use was made by the disputants in the constitutional battles of the next century; the *Archeion* (London 1591), a historical commentary on the central courts of justice in England; and *A Perambulation of Kent* (London 1576, rev. ed. 1596), which is the earliest known history of any English county.

PERCY H. WINFIELD

Consult: Holdsworth, W. S., *A History of English Law*, 9 vols. (3rd ed. London 1922-26) vol. iv, p. 117-19; Putnam, B. H., *Early Treatises on the Practice of the Justices of the Peace in the Fifteenth and Sixteenth Centuries*, Oxford Studies in Social and Legal History, vol. vii, no. xiii (Oxford 1924); Winfield, P. H., *The Chief Sources of English Legal History* (Cambridge, Mass. 1925) p. 45, 329.

LAMENNAIS, HUGUES FÉLICITÉ ROBERT DE (1782-1854), French social philosopher. Lamennais, the son of an ennobled shipowner, was influenced in the years of his early education by the rationalistic outlook of the French Revolution. But as a result of his philosophical and historical studies and the influence of his brother Jean Marie he soon became convinced of the paramount importance of religious belief as the basis for a program of action. All his views on social philosophy and social reform were henceforth expressed in the framework of religious doctrine, within which he managed, however, to oscillate between ultraconservative

and ultraradical extremes. Indeed few men have achieved such a complete revolution in their thought as this upholder of the strictest Romanist claims who died the excommunicated champion of Red democracy after having occupied every intermediate position between those two poles.

Lamennais was ordained in 1811. Between 1808 and 1825 he published a number of books and articles asserting that the authority of the church was so absolute that not even the pope could dominate the institution or surrender the smallest particle of its authority. Gradually, however, he came to the conclusion that only in a completely free society could the church be really free; so gathering round him a band of ardent young disciples, prominent among whom were Lacordaire and Montalembert, he founded in 1831 the newspaper *Avenir*, the aim of which was to win Catholic opinion to this new conception of the church as "ruling men's minds not by fear or outward power but entirely by spiritual forces exercised in perfect freedom" and in which he championed freedom of the press, freedom of conscience, disestablishment and adult suffrage. Such a program was a complete contradiction of papal policy; Lamennais' paper was soon condemned and he was called upon to recant his liberal views. Far from yielding, he published the most revolutionary of his writings, the *Paroles d'un croyant* (Paris 1834, new ed. Brussels 1838; English translation London 1834), the "red cap on the cross," as it has been termed, and was excommunicated in 1834. His chief disciples, however, submitted with varying degrees of alacrity. Any hopes that Lamennais would now place himself at the head of the growing democratic movement were disappointed: with the break up of the *Avenir* his genius for leadership seemed to leave him. He continued to write and lecture, gradually approaching the full communist position, but never broke away from religion definitely enough to throw in his lot with the socialists of his day, who frankly rebelled against all religious faith. Although elected a deputy to the National Assembly in 1848 he never wielded there the influence which his work as a democratic pioneer would have warranted.

Lamennais' inability to grasp the implications and consequences of his position, his failure to understand the very elements of the theory of papal supremacy and of the ecclesiastical system of which he himself had been so prominent an exponent, go far to explain his ineffectiveness,

which in turn deprived the liberal Catholic movement of any hope of success.

ROGER SOLTAU

Works: Two so-called *Oeuvres complètes*, both incomplete, are available (12 vols., Paris 1836–37; 10 vols., Paris 1844); *Correspondance de F. Lamennais*, ed. by E. D. Forgues, 2 vols. (new ed. Paris 1863); *Oeuvres inédites de F. Lamennais*, ed. by Ange Blaize, 2 vols. (Paris 1866); *Correspondance inédite entre Lamennais et le baron de Vitrolles*, ed. by E. D. Forgues (Paris 1886); *Un Lamennais inconnu, lettres inédites de Lamennais à Benoît d'Azy*, ed. by A. Laveille (Paris 1898); *Lettres inédites de Lamennais à Montalembert*, ed. by E. D. Forgues (Paris 1898); *Lettres inédites de Lamennais à la baronne Cottu*, ed. by G. P. d'Haussonville (Paris 1910).

Consult: Boutard, Charles, *Lamennais, sa vie et ses doctrines*, 3 vols. (Paris 1905–13); Duine, F., *La Mennais* (Évreux 1922); Maréchal, Christian, *La jeunesse de La Mennais* (Paris 1913), and *La Mennais: la dispute de l'essai sur l'indifférence* (Paris 1925); Spuller, E., *Lamennais* (Paris 1892); Roussel, Alfred, *Lamennais d'après des documents inédits*, 2 vols. (Rennes 1892), and *Lamennais intime, d'après une correspondance inédite* (Rennes 1897); Janet, Paul, *La philosophie de Lamennais* (Paris 1890); Dudon, Paul, *Lamennais et le Saint-Siège* (Paris 1911); Faguet, Émile, in *Politiques et moralistes*, 3 vols. (Paris 1891–99) vol. ii, p. 83–132; Renan, E., *Essais de morale et de critique* (Paris 1859) p. 141–203; Laski, H. J., *Authority in the Modern State* (New Haven 1919) ch. iii; Soltau, R., *French Political Thought in the Nineteenth Century* (London 1931) p. 78–88. For more detailed bibliography consult the bibliography on Lamennais by F. Duine (Paris 1923).

LAMETTRIE, JULIEN OFFRAY DE (1709–51), French physician and philosopher. Lamettrie was trained in the physical and natural sciences; later at Leyden he studied medicine under Boerhaave, several of whose works he translated into French. His medical studies and his observations of his own illnesses led him to a system of philosophy which he set forth in several works: *Histoire naturelle de l'âme* (The Hague 1745, new ed. Oxford 1747); *L'homme machine* (Leyden 1748, ed. by M. Solovine, Paris 1921; English translation, Chicago 1912); *Homme plante* (Potsdam 1748); *Réflexions philosophiques sur l'origine des animaux* (Berlin 1750); *Vénus métaphysique, ou essai sur l'origine de l'âme humaine* (Berlin 1751).

Lamettrie was one of the first French writers to develop a materialistic doctrine. His outlook, however, was more vitalistic than mechanistic, since it attributed to matter the capacity of sensation and feeling—indeed all the powers that were hitherto attributed to the soul. In the *Histoire naturelle de l'âme*, his fundamental work, Lamettrie begins with the accepted notions of

scholastic metaphysics—the distinctions of soul and body and form and matter—only to lead up gradually to a complete monistic materialism. The same materialism he afterwards expounded without dialectical preliminaries in his sensational *L'homme machine*. The soul without the body, he reasons in the *Histoire naturelle*, can neither exist nor be known. Hence the senses, which depend upon the body, are the sources of and guides to all our knowledge. Now the senses teach us that form cannot exist without matter or matter without form but that all matter receives its form from other matter; the same is true of motion, which does not exist by itself but is received by one piece of matter from another.

Having thus demonstrated that form and motion do not emanate from an immaterial principle acting upon purely passive matter but are contained as principles in concrete material substances, Lamettrie goes on to show that matter has also the capacity of feeling, since animals, which have no soul whatever, express their emotions in the same manner as men. With this as a corner stone Lamettrie proceeds to build up his whole psychology and theory of knowledge. All the human faculties, memory, imagination, judgment, passion, are, like sensations, essentially material manifestations. Only theology can affirm the existence of a rational soul as an immaterial entity, but the arguments of theology need not be retained by philosophy. It follows therefore that the same determinism which governs movements of matter also controls the fluctuations of the soul. Men (as well as whole peoples) undergo primarily the influences of the material conditions under which they live.

It is through the organization of the human body, on the one hand, and the action of material circumstances, on the other, that Lamettrie explains the origin of moral and political ideas. The organization of the body predestines man to seek utility, pleasure and happiness and this search is the natural moral law. Knowledge of the existence and attributes of God is practically unimportant. Lamettrie's empirical sensualism led him to agnosticism in metaphysics and to utilitarianism and relativism in morals.

While the pursuit of utility is a universal law, life in society results in the diversification of human customs. There arise civilized customs and complex feelings, in which education may play an important role whether by developing the organization of the individual or by leading him better to serve the interests of society and to identify his welfare with that of society.

All these ideas, developed between 1745 and 1751, became the most commonplace themes of Diderot and the *encyclopédistes*. Certain of them are found also in Voltaire, Rousseau and Buffon.

RENÉ HUBERT

Works: *Oeuvres philosophiques*, 3 vols. (new ed. Berlin 1796).

Consult: Boissier, R., *LaMettrie, médecin, pamphlétaire et philosophe* (Paris 1931); Poritzky, J. E., *Julien Offray de Lamettrie, sein Leben und seine Werke* (Berlin 1900); Lange, F. A., *Geschichte des Materialismus und Kritik seiner Bedeutung in der Gegenwart*, 2 vols. (new ed. Leipsic 1926), tr. by E. C. Thomas, 3 vols. (3rd ed. London 1925) vol. i, bk. i, sect. 4, ch. ii; Paquet, H. R., *La philosophie matérialiste au XVIII^e siècle, essai sur La Mettrie, sa vie et ses oeuvres* (Paris 1873); DuBois-Reymond, E., *Lamettrie* (Berlin 1875).

LAMMASCH, HEINRICH (1853-1920), Austrian international jurist. Lammasch achieved fame as a champion of international arbitration in the pre-war period and was one of the most prominent figures in the peace movement. While professor of criminal law at the University of Vienna he displayed his international bent in a work dealing with extradition, *Auslieferungspflicht und Asylrecht* (Leipsic 1887). He was led by his participation as technical expert in the Austro-Hungarian delegation at the Hague Peace Conference of 1899 to turn more and more to questions of international law. He was consulted repeatedly after he became Austrian member of the Hague Tribunal. Thus in 1903 he was arbiter in the Venezuela question and in 1905 in the Muscat Dhows case; in 1910 he presided in the North Atlantic Coast Fisheries case involving the United States and Great Britain and in the Orinoco Steamship Company case between the United States and Venezuela. He also served the cause of arbitration as a scholar and publicist, arguing for its institutionalization in *Die Lehre von der Schiedsgerichtsbarkeit in ihrem ganzen Umfange*, published in two parts in the *Handbuch des Völkerrechts* series (vol. iii, pt. iii, Stuttgart 1913-14). In several works he expressed his faith in a renaissance of international law after the World War. Lammasch himself regarded his *Das Völkerrecht nach dem Kriege* (Institut Nobel Norvégien, Publications, vol. iii, Christiania 1917) as his most important work. As a member of the Austrian upper house he had pursued during the war an outspoken policy of appeasement with the Entente and for this reason at the end of October, 1918, he was appointed by the last Hapsburg emperor, Charles, as chief of the Austrian ministry. But he was unable to prevent the collapse of the

monarchy, and after he had vainly sought as member of the Austrian peace delegation at Saint-Germain to obtain equitable peace conditions he withdrew from active life and died in complete retirement.

WALTHER SCHÜCKING

Consult: Scott, J. B., in *American Journal of International Law*, vol. xiv (1920) 609-13; Bisschop, W. R., in *British Year Book of International Law*, 1920-21 (London 1920) p. 223-30; Sperl, Hans, in *Neue österreichische Biographie*, ed. by Anton Bettelheim, vol. i (Vienna 1923) p. 44-54.

LA MOIGNON, GUILLAUME DE (1617-77), French jurist. Lamoignon participated in the *Fronde* but he knew when to rejoin the party of the king, who showered him with favors. Despite this vacillation his reputation as an honest man and honest jurist impressed Cardinal Mazarin and in 1658 he became president of the Parlement of Paris. Taking advantage of whatever independence magistrates possessed at that time he defended with conviction the rights of the Parlement. In 1661 he presided at the celebrated trial of Fouquet, but as he intended to acquit him he was replaced by Séguier. Another evidence of his honesty was his intercession with Colbert on behalf of the holders of *rentes*. He maintained his position against Colbert at the Conseil du Roi and before the Dutch war succeeded in inducing the king to raise a loan rather than to levy new taxes.

But Lamoignon rendered his greatest service in the unification of French law, at which he worked ceaselessly with Fourcroy and Auzanet. Even in the second half of the seventeenth century France did not know the benefits of legal unity. Colbert proposed, as he said, to "compose French law"; and when he appointed a judicial council to draft civil, criminal, commercial and maritime ordinances, Lamoignon was principally charged with studying and reviewing the projects. He had a large share in the drafting of the Ordinance of 1667 relating to civil procedure and that of 1670 relating to criminal procedure. In private law Lamoignon's great work is his *Arrestez de M. le Premier Président de Lamoignon ou loix projetées* (2 vols., Paris 1702; new ed. 1783), which following the objectives of such men as Dumoulin and Loysel also sought to fuse the *coutumes*, to bring together under different titles all the rules of French jurisprudence, in order thus to provide a common legislation for the entire kingdom.

PAUL THOMAS

Consult: Monnier, F., *Guillaume de Lamoignon et Col-*

bert (Paris 1862); Clément, P., "La réforme des codes sous Louis XIV" in *Revue des questions historiques*, vol. vii (1869) 115-44; Esmein, A., *Histoire de procédure criminelle en France* (Paris 1882), tr. by John Simpson as *History of Continental Criminal Procedure*, Continental Legal History series, vol. v (Boston 1913) p. 204-10; Viollet, Paul, *Droit privé et sources, histoire du droit civil français* (3rd ed. Paris 1905) p. 236-42, 260 with further bibliography.

LAMPERTICO, FEDELE (1833-1906), Italian economist. Lampertico owes his distinction not to any original contribution to economic theory but to his participation together with Scialoja, Cossa, Messedaglia, Luzzatti and Cusumano in the movement to revitalize the methods of economic research by stressing inductive investigation. The movement culminated in the famous congress of the Associazione per il Progresso degli Studi Economici held in Milan in 1875 and in the publication of the first (Paduan) series (1875-79) of the *Giornale degli economisti* (formerly *Rassegna di agricoltura, industria e commercio*). A spokesman of the new historical school, Lampertico was made the target of an impassioned attack by Francesco Ferrara on the invasion of economics by German historical tendencies. Lampertico replied that in its predilection for inductive observation as against abstract deduction and for principles of local and temporary validity as opposed to universal and absolute generalizations the new school was following scientific traditions well established in Italy. He did not, however, deny the existence of general laws in economics but only cautioned against their assumption on a priori grounds or without sufficient inductive basis. Lampertico's preference for historical studies is evidenced by his *Giammaria Ortes e la scienza economica al suo tempo*, an essay on the Venetian friar who in the second half of the eighteenth century came very near to the formulation of the Malthusian doctrine of population. In 1871 he published *Sulla statistica teorica in generale e su Melchiorre Gioia in particolare*, a study of the beginnings of statistics in Germany and Italy. Lampertico completed only five volumes of his general treatise, *Economia dei popoli e degli stati*, which was for a time heralded as a new classic.

Lampertico combined pursuit of scholarship with active participation in the political and economic affairs of his country. From 1866 to 1870 he was a member of parliament and from 1873 senator for life; some of his senatorial reports rank as classics. He successfully resisted the introduction of agricultural protectionism in 1885 and on several occasions urged the adop-

tion of various measures of social reform. It was largely as a result of his untiring efforts as exemplified in his reports on the non-convertible banknote issue in 1868 and on the resumption of cash payments in 1881 that the circulation of paper money did not undermine monetary stability in the years 1866 to 1884 and that the paper issues were subsequently kept within bounds. In all his activities he effectively combined theoretical knowledge with keen insight into everyday economic problems.

LUIGI EINAUDI

Important works: *Giammaria Ortes e la scienza economica al suo tempo* (Venice 1865); *Sulla statistica teorica in generale e su Melchiorre Gioia in particolare* (Venice 1871, 2nd ed. Rome 1879); *Economia dei popoli e degli stati*, 5 vols. (Milan 1874-84); "A Francesco Ferrara" in *Giornale degli economisti*, vol. ii (1875-76) 115-44; *Della vita e degli scritti di Luigi Valeriani Molinari, economista* (Rome 1904).

Consult: Rumor, Sebastiano, *La vita e le opere di Fedele Lampertico* (Vicenza 1907), with complete bibliography; Schullern-Schrattenhofen, Hermann von, *Die theoretische Nationalökonomie Italiens in neuester Zeit* (Leipzig 1891); Loria, Achille, in *Economic Journal*, vol. xvi (1906) 311-13.

LAMPRECHT, KARL (1856-1915), German historian. Lamprecht, the son of a Protestant minister, was born in Jessen and studied at the University of Bonn. After various minor youthful writings—*Beiträge zur Geschichte des französischen Wirtschaftslebens im elften Jahrhundert* (Leipzig 1878), *Initial-Ornamentik des VIII. bis XIII. Jahrhunderts* (Leipzig 1882)—he published in 1886 his first large work, *Deutsches Wirtschaftsleben im Mittelalter* (3 vols., Leipzig 1885-86), a product of wide original research and monographic thoroughness, devoted in the main to the Moselle territory. In 1890 he became professor at Marburg and in 1891 at Leipzig, where he taught until his death.

Lamprecht's most important work is his *Deutsche Geschichte* (12 vols., Berlin 1891-1909; 6th ed. of vol. i, 5th ed. of vols. ii-v, and 4th ed. of vols. vi-xii, 1920-22) supplemented by his *Zur jüngsten deutschen Vergangenheit* (3 vols., Berlin 1901-04; 4th ed. 1921-22). This work represented several important advances in historical methodology and raised a wave of controversy both in Germany and abroad. Lamprecht broadened the range of general historiography beyond the confines of an exclusively or predominantly political treatment of the past to a complete picture of national, economic and intellectual history. He introduced into professional historiography the collectivistic and economic

point of view as it was first developed by Karl Marx. He considered it of primary importance to trace the history of classes and social groups and of economic mass movements in the development of the social life, of the forms of literature and art, of the great currents in intellectual life. Economic hyperboles, however, such as the characterization of Walther von der Vogelweide as a product of money economy, flowed often from his pen.

Lamprecht adapted to history the idea of evolution and used it to greatest advantage in his treatment of the great collective phenomena of history. In this connection he developed the idea of a collective psychical condition for every age, which like a diapason penetrates into every phase of human activity. In his *Deutsche Geschichte* he characterizes the primitive period as the symbolic, the early Middle Ages as the typical, the later Middle Ages as the conventional, the Renaissance and the Enlightenment as the period of individualism, the age of romanticism and the industrial revolution as one of subjectivism and the most recent period as one of nervous tension (Reizbarkeit). In itself a concept of great range and thus of highest value, it is defective in that it does not permit, as it should, the formation of a unified, well organized whole but jumps from one field of life to another. This is a fault in construction, bringing into the plan a descriptive element and depriving it of a large measure of desirable conceptual strength. Lamprecht's collectivism also suffers from its lack of attention to the part played by great leaders and creative men in the fields of action and intellect. Such data as he does have are intercalated instance by instance in the general exposition but are not bound up with it organically. He always wrote the history of facts, never in a deeper sense of personalities and of men. He never realized the need of creating a history of personality instead of mere biographical fragments.

It was Lamprecht's endeavor to demonstrate the conformity of history to law, but his demonstration remained theoretical. He believed that the succession of periods which he established for German history was also of universal validity, and he intended to demonstrate his thesis by a universal-historical exposition. His death prevented him from carrying out this plan.

Lamprecht was of a controversial temperament; he enjoyed attacking and was himself bitterly attacked. He achieved a large measure of success both in Europe and in America, which he visited and where he received an honorary de-

gree at Columbia University, but the German academic historians opposed his theories fiercely. His methodological failings, however, cannot lessen the greatness in range and in worth of his work. Lamprecht founded no school and his point of view may perhaps not be retained in the future, but traces of his work have unconsciously permeated much of contemporary historical writing and he has had particular influence on such men as Steinhausen, Goetz in Germany and Lacombe, Berr, Monod and Pirenne in France and Belgium.

Lamprecht elaborated his views on history in his *Alte und neue Richtungen in der Geschichtswissenschaft* (Berlin 1896) and in *Moderne Geschichtswissenschaft* (Freiburg i. Br. 1905, 3rd ed. Berlin 1920; tr. by E. A. Andrews as *What is History?*, New York 1905). In 1909 he founded the Institut für Kultur- und Universalgeschichte in Leipsic, which served as a center for research carried on along the lines developed by him.

KURT BREYSSIG

Consult: Köttschke, R., "Verzeichniss der Schriften Karl Lamprechts" in Sächsische Akademie der Wissenschaften zu Leipzig, Philologisch-historische Klasse, *Berichte über die Verhandlungen*, vol. lxvii (1915) 105-19; Köttschke, R. and Tille, A., *Karl Lamprecht* (Gotha 1915); Ritter, M., *Die Entwicklung der Geschichtswissenschaft* (Munich 1909) p. 436-61; Schmoller, G., "Zur Würdigung von Karl Lamprecht" in *Schmollers Jahrbuch*, vol. xl (1916) 1113-40; Arens, Franz, "Karl Lamprecht" in *Preussische Jahrbücher* vol. cciii (1926) 191-213 and 306-28; Seifert, F., *Der Streit um Karl Lamprechts Geschichtsphilosophie* (Augsburg 1925); Spiess, E. J., *Die Geschichtsphilosophie von Karl Lamprecht* (Erlangen 1921); Hellpach, W., "Geschichte als Sozialpsychologie" in *Kultur und Universalgeschichte* (Leipsic 1927) p. 501-17; Barnes, H. E., *The New History and the Social Studies* (New York 1925) p. 198-204.

LAMPREDI, GIOVANNI MARIA (1732-93), Italian political theorist and jurist. Lampredi after first studying literature and philosophy turned to theology and secured his doctorate in 1756 at the Theological College of Florence. In 1763 he was appointed to the chair of canon law at the University of Pisa, where he later became professor of public law. As a result of his teaching in the latter post he wrote his principal work, *Juris publici universalis sive juris naturae et gentium theorematum* (3 vols., Leghorn 1776-78, 3rd ed. Florence 1792-93; tr. into Italian by D. Sacchi, 4 vols., Pavia 1818, 2nd ed. Milan 1828). Second only to the earlier great works of Grotius, Pufendorf, Burlamaqui and Mably that of Lampredi is distinguished for order and clarity, for profound knowledge and for the feeling of

humanity which pervades the whole. Lampredi's reputation was increased by his *Del commercio dei popoli neutrali in tempo di guerra* (2 vols., Florence 1788 and Milan 1831), which was translated into various languages and occupies an important position in the literature of international law. In this work he upholds the thesis, which was already being put forward in the United States, that neutrals except in situations involving legitimate defense on the part of the belligerents should be allowed to trade freely with belligerents, as in time of peace, on the sole condition of impartiality.

PROSPERO FEDOZZI

Consult: Banucci, P., *Elogio di G. M. Lampredi, professore di diritto pubblico nell'Università di Pisa* (Florence 1793); Cauchy, E. F., *Le droit maritime international*, 2 vols. (Paris 1862) vol. ii, p. 269-82; Pierantoni, A., *Storia degli studi del diritto internazionale in Italia* (2nd ed. Florence 1902) p. 835-57; Wheaton, Henry, *History of the Law of Nations in Europe and America* (New York 1845) p. 309-22.

LANCASTER, JOSEPH (1778-1838), English educator. In 1798 Lancaster opened in London a humble free day school for poor children, which soon had several hundred pupils. Compelled to use the older children to instruct the younger, he organized so thorough and effective a "monitorial system" that many visitors testified to its superiority over all contemporary pedagogical methods and accepted his claim that one master could educate a thousand children. Lancaster's business inefficiency led to the formation of a committee to manage his affairs; this became in 1813 the British and Foreign School Society. Observing that Lancaster was winning influential support, the Church party founded denominational monitorial schools, put forward Andrew Bell, an Anglican clergyman, as the real discover of the method and in 1811 founded the National Society for Promoting Education of the Poor. Lancaster soon left the British and Foreign School Society, which seemed to be overshadowing his own reputation, and devoted the rest of his life to educational propaganda in England, Ireland and America. Schools of the Lancaster type were established in France, the United States, Canada and South America.

His importance lies in his own sound pedagogical intuitions and in the influence of the monitorial school on the English pattern of elementary education. His writing abounds in devices and ideas markedly in advance of his time. Cheapness, simplicity and widespread public approval led to a rapid multiplication of

monitorial schools, but their influence on elementary education was harmful. The system was alien to experiment and inquiry, magnified the importance of reading and reduced the teacher to the supervising of transient, ignorant and unskilled monitors. Its cheapness was a reproach to all other reformers, and its mechanical simplicity developed a routine procedure from which escape has proved slow and difficult.

FRANK SMITH

Important work: *Improvements in Education* (London 1803, 3rd ed. 1805).

Consult: Salmon, D., *Joseph Lancaster* (London 1904).

LAND BANK SCHEMES. In the many attempts to replace or supplement precious metals as a basis for note issue land bank schemes represent a series of experiments in which land was resorted to as the proper security. They fall into two groups, depending on whether the purpose underlying their formation was merely to expand the existing currency or in the course of transition to a stable metallic currency to replace a depreciated currency. The first group comprises the land bank experiments in England at the close of the seventeenth century and in the American colonies during the first half of the eighteenth century, the John Law scheme of 1717 and the experiment in assignats during the French Revolution. The second includes the Danish currency reform of 1813 and 1818 and the German monetary reform of 1923. Land bank schemes should obviously be distinguished from modern land mortgage banks, which serve merely as agencies for the mobilization of savings rather than for the creation of new credit in the form of note issues.

Several factors contributed to the origin and spread of the land bank projects in seventeenth century England. The remarkable commercial and industrial expansion, the growing failure of the supply of precious metals to meet the requirements of trade, the consequent disruption of business, the currency disorganization brought about by the general practise of debasing the coins in circulation and the increasing realization of the economic significance of the institution of credit—all these focused the attention of public opinion upon the necessity of supplementing metallic currency with other means of payment. The general confidence enjoyed by the goldsmith notes, based at the outset on gold deposits, inspired the practise of effecting payments by bills of credit secured by stocks of merchandise. It was but a short step from merchandise as a

basis for the issue of bills of credit to land, the most durable commodity. The attractiveness of land was further enhanced by the changing conception of wealth and a shift in emphasis from precious metals to land and labor, which became manifest at the close of the seventeenth century. Finally, the idea of land as a source of credit appealed to the economic interests of the land-owning class, which saw in this a means of strengthening its position at a time when control was rapidly passing to the rising merchant class; it was further encouraged by the government, which favored any extension of banking credit as an additional source of public credit.

The establishment of land banks was first suggested by Samuel Hartlib in 1653. A little later Francis Cradocke was authorized by Charles II to establish land banks in Barbados, but apparently the plan was never put into effect. The Bank of Credit, organized by the City of London in 1682, although established chiefly as a bank of credit against warehoused goods granted credit on mortgages on houses and estates. Four land banks were established in 1695 and 1696: John Asgill and Nicholas Barbon founded the Land Bank; John Briscoe the National Land Bank; Hugh Chamberlen the Bank of Credit on Land Rents, also called the Office of Land Credit; and, finally, Parliament adopted one of Chamberlen's schemes and founded the National Land Bank, to be distinguished from Briscoe's institution of the same name. While these schemes varied in detail, their underlying idea as expressed by Asgill was that "securities on Land's . . . are capable of being made Money." Land was to be mortgaged to the banks, which would in turn issue banknotes secured by the mortgages. Briscoe proposed to issue loans "in money or bills of credit" at 3.04 percent up to three fourths of the value of the land "settled" on the bank. Chamberlen promised to grant £8000 in "bills of credit" for every £150 of annual value of land, repayable in one hundred annual instalments of £100 each. In addition the subscribing landowners were privileged to receive for every £1000 paid in coin £7000 in notes of the bank as a loan. Of the £8000 of credit granted to subscribers £2000 was to be in the form of shares in a loan made to the government. It was presumably this circumstance which induced the government to adopt Chamberlen's scheme as the basis for its National Land Bank; the bank was intended to raise a government loan of £2,564,000. None of these schemes, however, proved successful. The

private land banks failed because their notes did not win the confidence of the people. The public had been accustomed only to those forms of paper money in which an immediate liquidation of the coverage was possible; this was true of the notes secured by merchandise but not of the land money which carried no recourse to specific plots of land. The government bank failed because the landowners refused to mortgage their lands. Moreover the increasing success of the Bank of England demonstrated the superiority of its principles to those underlying the land credit schemes and interest in the latter subsided; there is no record of any land banks in England after 1700.

The land bank experiments in the mother country were not unnoticed in the colonies, where conditions, acute shortage of coin and an abundance of land, were still more favorable to the introduction of "land money." Massachusetts Bay granted a land bank concession in 1686 authorizing the issue of notes secured by real estate, to "be esteemed as current moneys in all receipts and payments as well as for His Majesty's Revenue." For unknown reasons the project was never executed. The plan was revived in 1714 but failed to obtain the approval of the General Court, which had itself issued £50,000 in banknotes secured by real estate. Another land project was launched in 1740 providing for the issue of £150,000 in manufactory notes, secured by mortgages on land bearing 3 percent interest and repayable in twenty annual instalments in manufactory notes or in commodities, such as hemp and flax. The bank, however, was dissolved in 1741. In Connecticut the New London Society United for Trade and Commerce issued notes in 1732 but was dissolved the following year, its notes being exchanged for government notes. More widespread were the public loan or land banks which were organized in twelve of the thirteen colonies and charged with the issue of notes secured by land. Rhode Island ranked first in the use of such currency. In Pennsylvania a loan office was authorized in 1723 to issue small notes in denominations up to twenty shillings secured by estates up to one half of their value. The loans could not be in amounts less than £12.10.0 or more than £200, bore 5 percent interest and were to be repaid in eight equal annual instalments. The experiment was generally considered as beneficial to the province and was repeated with equal success in 1739. It is significant that the size of the loan was limited and its term fixed.

Of much wider scope were the experiments in land money in eighteenth century France. The first of them was carried out by John Law, who believed that a paper currency is preferable to a metallic currency and that land is superior to precious metals as a basis for note issue. The acquisition of title to all the land in Louisiana by the *Compagnie d'Occident* organized in 1717 enabled him to put his scheme into effect. Law used the shares representing the value of the Louisiana land as a basis for the note issue of the *Banque Royal*. As long as the note issue was limited in amount there was general confidence in the notes. The financial needs of the company as well as the growing requirements of the government, however, forced a continuous increase in the note issue, which in turn necessitated an increase in the amount of stock completely out of proportion to the value of the land which the stock supposedly represented. For a time the speculative movement continued to support the price of the hopelessly watered stock and the public still deemed it safe collateral for the note issue. But once the speculative wave receded and the value of the securities collapsed, the notes obviously shared the fate of their collateral. As distinct from the notes of the *Banque Royal* the paper currency of the French Revolution, the assignats (*q.v.*) and *mandats territoriaux*, was secured by lands of the émigré nobles and of the church expropriated by the government. But the value of the land was indeterminate and the notes were actually inconvertible paper money whose value was rendered worthless by overissue.

The idea of land as security for note issue, however, proved valuable and workable in the Danish currency reform of 1813 and in the rehabilitation of the depreciated German currency in 1923. The Danish Rigsbank was organized for the purpose of replacing a variety of depreciated currencies by one stable currency—the *rigsbankdaler*, equal in value to one half of the Schleswig-Holstein silver thaler but not redeemable in specie. The funds of the bank were obtained by the establishment of a first mortgage upon all the real estate of the country amounting to one sixth of its value and paying interest at the rate of 6½ percent. The mortgage could be redeemed at any time by the payment of the full obligation in silver. The bank was authorized to issue notes to the amount of 46,000,000 *rigsbankdaler*, 27,000,000 of which were to be used for redeeming the previous currencies, 15,000,000 for rehabilitating the finances

of the government and 4,000,000 for extension of credit. The notes were the sole legal tender currency. Because of the dissatisfaction of the propertied classes with the mortgage indebtedness created by the law the government subsequently modified its provisions and finally revised it in 1818. The Rigsbank was replaced by the Nationalbank and the mortgages were converted into shares, thus turning the debtors of the Rigsbank into the creditors of the Nationalbank, which was instructed to maintain parity between the banknotes and their specified value in silver and in time to assure complete redeemability of the notes. The bank fulfilled its purpose; it still exists although in somewhat different form as Denmark's central bank of issue.

The experiment of the German Rentenbank was essentially similar to that of the Danish Rigsbank. The funds were obtained by imposing a first mortgage on agricultural land and by creating a similar obligation on all business enterprises including banks. The mortgage amounted to 4 percent of value as ascertained in the assessment of the *Wehrbeitrag* (the levy on property for military purposes imposed in 1913) but was not to exceed 3,200,000,000 gold marks. On the basis of this obligation the Rentenbank issued *Rentenbriefe* (bonds) in denominations of 500 gold marks and multiples thereof, which in turn were used as a cover for *Rentenbankscheine*. The issue of the latter was limited to 2,400,000,000 *Rentenmark*, a unit equal in value to a gold mark. *Rentenbankscheine*, redeemable in *Rentenbriefe*, were accepted in all public offices and soon replaced the depreciated paper mark bills; the rate of exchange was one billion paper marks to one *Rentenmark*. The Rentenbank achieved its purpose; it rescued Germany from a complete monetary chaos in 1923 and paved the way for a speedy return to the gold standard in 1924.

None of the schemes described involved the creation of an independent currency expressed in units of land. The lack of homogeneity in land and the difficulties inherent in land valuation obviously disqualify land as a measure of value. But even in the more modest task of serving as a basis for the issue of notes in terms of the standard metallic currency the usefulness of land is rather limited. The notes of the English land banks failed to gain general acceptance because of their doubtful redeemability. But even if land bank notes were to have an immediate recourse to specific plots of land, lack of

mobility and liquidity characteristic of land and the fluctuation of land values would be sufficient to deter many from accepting land notes as readily as coins or notes redeemable in coin. In the case of the John Law scheme and French assignats, where initial acceptability was assured by governmental sanction, the value of the notes was soon impaired by overissue. Even with the cooperation of the money issuing authorities, however, land provides no criterion for the volume of money required and a currency based on land would not possess sufficient elasticity in adapting itself to needs of trade. On the other hand, where, as in the case of the Danish and the German experiments, the size of the note issue was determined upon grounds other than the amount of land and once fixed was rigidly adhered to, the temporary use of the land as a material basis for the issue of notes supplied the psychological stabilizing factor which was essential to the restoration of public confidence,

a confidence which had been thoroughly shaken by the almost complete depreciation of the standard currency.

WILHELM VERSHOFEN

See: PAPER MONEY; BANKNOTES; ASSIGNATS; BUBBLES, SPECULATIVE; LAND MORTGAGE CREDIT.

Consult: Richards, R. D., *The Early History of Banking in England* (London 1929); Sparks, Earl S., *History and Theory of Agricultural Credit in the United States* (New York 1932) p. 45-81; Davis, A. M., *Currency and Banking in the Province of Massachusetts Bay*, 2 vols. (New York 1901) vol. ii; Svoboda, Hanno, *Grund und Boden als Währungsunterlage*, Nürnberger Beiträge zu den Wirtschaftswissenschaften, no. 14-15 (Nuremberg 1928); Harsin, Paul, *Les doctrines monétaires et financières en France du XVII^e au XVIII^e siècle* (Paris 1928) p. 115-90; Harris, S. E., *The Assignats* (Cambridge, Mass. 1930); Imhof, Rudolf, *Die Rentenmark* (Leipsic 1928).

LAND GRANT COLLEGES. See AGRICULTURAL EDUCATION; UNIVERSITIES AND COLLEGES.

LAND GRANTS

UNITED STATES.....	B. H. HIBBARD
BRITISH EMPIRE.....	HERBERT HEATON
LATIN AMERICA.....	GEORGE MCCUTCHEEN MCBRIDE

UNITED STATES. That the making of grants of land from the public domain has always been a significant public policy in the United States is not surprising in view of the fact that in the early days of the nation the leanness of the public purse made the land the most important asset in the possession of the state and national governments. Land grants in lieu of immediate cash payments have been generously used to reward or partly to remunerate individuals, corporations and institutions for the performance of public or quasi-public services. Even the colonies before the formation of the confederation and the republic had quickly learned to make grants of land for the support of schools and churches and often for roads and other enterprises of a social character; following the organization of the national government federal land grant practises did not differ materially in character from the colonial grants. The public domain was always handled with a view to settlement and land was regarded as a source of revenue. Thus delays in land grants were frequently opposed by both the eastern and western sections of the country: by the east for fiscal reasons and by the west because there settlement and agrarian development constituted the very basis of economic well being. Prompted by these considera-

tions American governments developed a varied program of land grants, among which the most conspicuous were grants as military bounties; for educational purposes; to encourage internal improvements, particularly the building of railroads; and to help new states erect public buildings and provide needed institutions, such as penitentiaries and asylums. In actual practise the policy of making land grants was not terminated until substantially the whole public domain had been disposed of. But the principle of encouraging enterprises of one kind or another through grants of land was not abandoned; as the nation increased in wealth, money appropriations or subsidies were substituted for land grants, so that today government support of shipping, for example, stems directly from the earlier grant of sections from the public domain to help the states in the building of wagon roads and canals.

The ancient policy of granting land as a military reward or to encourage military service was almost immediately adapted to American colonial needs and conditions. Virginia as early as 1646 gave one hundred acres to the commander of its settlement at Middle Plantation; Connecticut donated land to the leaders in the Pequot war; in Maryland land was granted to the sol-

diers who helped quell an insurrection. These grants were looked upon as compensation for army service. Land grants for a closely related but different purpose appeared when a number of the colonies offered lands to frontier settlers with the stipulation that they maintain some sort of armed resistance against the Indians or take part in the colonial wars which frequently broke out. In 1679 and again in 1701 Virginia made such grants; Connecticut adopted a similar scheme for frontier defense in 1733 and Pennsylvania in 1755. The English government itself in an effort to obtain recruits for service in the French and Indian War made liberal offers of tracts of land ranging from 50 to 5000 acres, depending on the soldier's rank.

At the beginning of the Revolutionary War the Continental Congress made grants to soldiers despite the fact that it had no clear title to any part of the continental area. The individual states pursued a similar policy. To induce enlistments as the war progressed Congress made increasingly tempting offers of land grants: by 1780 a major general could look forward to the possession of 1100 acres and a brigadier general to 850 acres. Before 1800 more than 2,000,000 acres had been distributed by land warrants thus issued to soldiers who had participated in the war. These warrants were not transferable until 1852; as a result many were not redeemed before that date.

To every private serving in the army during the War of 1812 Congress held out the promise of 160 acres of land. Little freedom, however, was accorded the discharged soldiers in their choice of land; they were obliged to apply for it within five years and to take their quarter sections within one of several military districts, the particular assignment being picked by lot. The Mexican War produced a new crop of bounties, which were similar in character to the preceding grants. A law of 1850 granting bounty lands to men of every rank and applicable to all participants in the wars of the republic from 1790 on inaugurated a much more liberal policy. The act of 1852, as has been pointed out, went even further when it made all military bounty warrants assignable instruments; while in 1855 a general act gave a bounty of 160 acres to any soldier, or his heirs, who had seen service in any war after 1790. The amount of land disposed of by the government in this manner was fully 68,000,000 acres, an area equal to that of the state of Colorado.

These measures of the 1850's, instead of bene-

fitting the returned soldiers, had as their chief result the development of a veritable orgy of land speculation. That the government itself was not unaware of this state of affairs may be seen from the following observation by the commissioner of the General Land Office: "The files and records of this office show that not one in five hundred of the land warrants issued and placed in the hands of the soldiers or their heirs has been located by them . . . the most part having been used by persons to acquire title to the public lands for speculation purposes."

With the passage of the Homestead Act of 1862 the land bounty device as a reward for military service went out of use. Veterans of the Union armies, however, were extended significant privileges under the new scheme. They were, for instance, permitted to patent 160 acres (instead of the 80 acres allowed the homesteader) within the limits of railroad grants; they were also permitted to deduct the length of period of service from the minimum five-year residence requirement called for before a title could be gained, although a minimum residence of one year was required even for them.

Land grants for the encouragement of educational programs have an equally long history in the United States. As early as 1621 Virginia made an appropriation of 1000 acres for the support of common schools, while Massachusetts began in 1635 to grant land to towns for educational purposes. These initial grants were in the north mainly to towns and in the south to counties. The early practise of granting to the local unit for school purposes one lot or another designated portion of a township led to the general plan of turning over to the states for school use one section of land, or 640 acres, within each township. This policy was incorporated into the Ordinance of 1787. At first the states paid the money received for the land to the townships; after 1875 such money was ordered by Congress to be put into permanent state school funds. Beginning in 1848 two sections per township were given to the states for school support and later three states, Arizona, New Mexico and Utah, largely because of the poor quality of much of the land involved were allowed four sections per township. In 1875 first with particular application to Colorado and then to states subsequently admitted a restriction was placed on the price at which school lands might be sold. For Colorado the minimum was \$2.50 per acre and for Washington, Montana, North Dakota, South Dakota, Idaho and Wyoming it

was set at \$10 per acre. Considerable amounts of land other than those directly appropriated by Congress as common school lands were added to swell the school land category. Chief among the additions were the "half-million acre grants," the proceeds from which the five states of California, Iowa, Nevada, Oregon and Wisconsin paid into their school funds; the grants of salt spring lands made to the states of Ohio, Indiana, Missouri, Arkansas and Nebraska and whose sale was also ordered for the purpose of advancing education; and the "swamp land grants" made to the states of Alabama, Florida, Illinois, Indiana, Louisiana, Michigan, Minnesota, Mississippi, Missouri, Ohio, Oregon and Wisconsin, the revenues from which were usually also added to the school funds. In all fully 130,000,000 acres of the public domain were distributed among the states for the purpose of fostering common school activities.

Land grants to encourage education did not stop with the common school. Massachusetts established the first endowed college (subsequently renamed Harvard) in 1636 at Newton; and William and Mary College, Yale College and Dartmouth College were the beneficiaries of land grants or received the receipts from the sale of public lands. Congress thus had an excellent precedent to follow when in connection with the Ohio Company and Symmes purchases of 1787 it reserved three townships of land for the purpose of supporting institutions of higher learning in the Ohio Territory. In 1804 three townships were set aside from the public lands of the Northwest Territory for similar use. Following these beginnings each public land state received as a minimum a grant of two townships of land for the support of a university. The newer states were even more generously endowed; nine of them were given land not only for universities but also for schools of mines, normal schools and other specialized educational projects. These gifts varied from 160,000 acres in the case of South Dakota to 800,000 acres in that of Oklahoma.

A special program was evolved for the support of agricultural and mechanic arts colleges. A few states, notably Michigan, Pennsylvania and Iowa, had undertaken the establishment of institutions of this type before the Civil War. It remained, however, for the Morrill Act, which Congress passed in 1862, to make provision for the establishment of such colleges in every state of the union. The statute granted 30,000 acres of the public land for each senator and repre-

sentative in Congress. Where states did not have within their own borders a sufficiently large area of public land to satisfy the terms of the grant they were to receive an equivalent amount of land scrip. This paper was to be sold to private individuals, who would then be permitted to locate their sections in the still unoccupied portions of the public land states. All the proceeds thus obtained through the sale of land or scrip were to be put into permanent funds. The total amount of land disposed of in this fashion was 11,050,000 acres.

With a view to controlling flood waters, especially of the Mississippi River, and in the hope that such a program would hasten the reclamation of marshy areas Congress began in 1849 a series of swamp land grants to the states. In all some 64,000,000 acres were thus distributed. While the intention of the lawmakers was commendable, the administration of the acts was so lax that only an infinitesimal part of the fixed objective was realized. The federal land commissioner permitted the states to locate swamp land by either one of two methods: they might rely on the surveyors' notes or they might select the lands through their own agents, merely submitting proofs to the federal authorities. In the great majority of cases the states chose the second method, and the land commissioner accepted the most nominal proofs; the result was that a large part of the land ceded to the states under this swamp land program could in no sense be called marshland. Very little reclamation work resulted from the grants. Actually only three of the states used the proceeds for the specified purposes; the rest added the moneys thus obtained to their school funds.

As in the case of military bounties and the support of education there was ample colonial precedent for land grants to encourage private enterprise. The colonies had made grants of land to induce the building of forts, the manufacture of gunpowder, the erection of iron and copper works and indeed any form of industrial activity that individuals might be willing to launch. The young American government adopted the device and used liberal grants of land from the public domain to subsidize particularly the construction of internal improvements. The first bounty of this nature was made to Ebenezer Zane in 1796 for the purpose of establishing ferries on the road west of Wheeling. This grant was not an outright gift but partook of the nature of a preemption right to three sections of land, for which Zane later turned in military warrants.

Actually the first real measure making land grants to promote an extensive internal improvement program was embodied in the act admitting Ohio to the union; by this statute the state was to receive 5 percent (2 percent of which was to be administered by the federal government) of the proceeds from the sale of public lands within its border for use in building roads. In 1823 Ohio was given 81,000 acres; a few years later 170,000 acres were turned over to Indiana for a similar purpose. All told, 3,250,000 acres of land were voted to the states to encourage the construction of wagon roads. Canal subsidies began with a land grant to Indiana in 1824; similar grants were made from time to time and by 1866, when the policy was terminated, a total of 4,500,000 acres had been given to Indiana, Ohio, Michigan, Wisconsin and Illinois. Somewhat similar in purpose were the land grants of 2,250,000 acres made to Alabama, Wisconsin and Iowa for the promotion of river navigation.

Surpassing even this generosity were the great gifts from the public domain made to the railroad builders. The first important grant of this nature was voted in 1850, when Congress ceded to Illinois, Alabama and Mississippi almost 4,000,000 acres which these states were to hold in trust toward the completion of the Illinois Central Railroad. From 1850 to 1871 Congress made eighty such grants to the states in the Mississippi valley. In the 1860's the railroads themselves were made the direct beneficiaries of congressional largess. Among others four great transcontinental railroads—namely, the Union Pacific, the Northern Pacific, the Atlantic and Pacific and the Texas and Pacific—received their charters from the federal legislature and, as subsidies, large areas along their rights of way. The Union Pacific, for example, was given alternate sections of land extending for twenty miles on each side of the road; the Northern Pacific was given twenty sections per mile on each side of the roadbed within the territories and half that amount within the states. During the 1850's and 1860's there passed into the hands of western railroad promoters and builders a total of 158,293,000 acres, an area almost equaling that of the New England states, New York and Pennsylvania combined. Not all the railroads were completed and many failed to fulfil their contract terms, with the result that patents were not filed in every case. Agnes C. Laut (*Romance of the Rails*) has estimated that only twenty-seven railroads earned their land grants and that these were able to certify 115,832,000 acres. In addi-

tion to federal land grants the individual states gave some of their public lands to hasten railroad construction. Texas alone made subsidies totaling 32,000,000 acres; the states of the Mississippi valley gave away 20,000,000 acres. The total acreage actually distributed reached the gigantic figure of 167,832,000 acres, or 262,238 square miles, a domain approximately the size of Texas.

The abuses accompanying this reckless policy were so numerous and so apparent that land grants as a form of subsidizing internal improvements ceased with 1871. But the west was to feel the ill effects for fully two decades and much of the hostility toward the railroads centered in the practises followed by these corporations in the disposal of their land. Chief of these evils was the habit of failing to patent their indemnity lands. The land grant railroads had been permitted to select in lieu of such land as would have been included in the first assignment but which for some circumstance, like previous occupation, was unavailable other sections sometimes lying a considerable distance from their grants. In the case of the Illinois Central Railroad, for example, this indemnity area was nine miles on each side of the track beyond the outer line of the regular alternate section grant; in the case of the Northern Pacific Railroad the indemnity lands lay ten miles on each side of the track beyond the borders of the grant. Between 1872 and 1887 with the approval of the General Land Office these indemnity lands were closed to settlers, although the railroads were permitted to cut the timber on them. Thus for fifteen years new homesteaders were frequently unable to approach within fifteen to thirty miles of a railroad. It was not until 1887 through an executive order from President Cleveland that these lands were thrown open for general settlement. In all some 21,000,000 acres were involved.

It is scarcely surprising that once having launched the policy of giving away the public lands to encourage a great variety of public, quasi-public and private activities Congress should be continually besieged to make land grants for the aid of all sorts of projects. The wonder is that with so much land on hand and with so little in the way of a guiding policy adventurers made so little headway. Examples did exist, however, of land grants being made for strange reasons. Thus in 1776 grants of land were offered and a few were actually made to deserters from the British army and navy; three townships in Ohio were given to Canadian refu-

gees soon after the revolution; the American agent to Lisbon was given a township; Lafayette received 34,000 acres; Lewis and Clark were given 1600 acres each and 300 acres were turned over to each one of their thirty-one companions. States received land grants to permit them to erect public buildings, the government bounty ranging from four sections in the case of Indiana to 274,000 acres in the case of Oklahoma. Still another type of land grant was the so-called five per cent fund given to public land states to induce them to make concessions when taxing public lands sold to settlers. Up to the close of the 1880's the federal government expected the states to use such moneys for the construction of public improvements; as has been indicated above, states admitted to the union in 1889 and later were directed to employ the fund for educational purposes.

The policy of land grants in the United States had at its heart a simple principle: the great public domain was to be disposed of as quickly as possible in the interests of settlement and in order to encourage the establishment of needed public services. The only real opposition to this congressional program came from the antebellum South, and this was not on the ground that the public domain was being squandered but because expansion westward by free farmers threatened the political supremacy of the slave planters. Otherwise, particularly following the Civil War, it was the general feeling in the United States that the sooner the free lands were settled the better; such evils as inevitably followed in the train of a program of generous land grants were deemed insignificant in the light of the extraordinary benefits to be realized by the nation at large. For a time, indeed up to the close of the World War, this appeared to be the counsel of wisdom. Rapid settlement of the public domain permitted the United States, a debtor nation as late as 1914, to pay its adverse international balances with the surplus agricultural products made possible as a result of homestead and land grant policies. The common assumption that the world was threatened with a failing food supply furnished an additional spur to the opening of all the public lands as quickly as possible to settlers. It was not until the 1920's that the shortsightedness of the whole procedure first became apparent: the deep depression in American agriculture for some years following the war was due largely to the haste with which the lands of the nation had been brought under cultivation. It is idle to speculate what the nature

of American economic development would have been had the public land policy been other than it was. It remains that the lands were disposed of; and American farmers, in whose interests presumably the course was pursued, turned out to be its chief victims.

B. H. HIBBARD

BRITISH EMPIRE. Until about 1830 alienation by free grant, subject perhaps to payment of a quitrent, which was rarely paid, and possibly to conditions of settlement and improvement, was almost the only method of disposing of crownlands in the colonies. Some grants, such as those to Colonel Talbot and the Canada Company, aimed definitely at fostering settlement; others, like the grants to Macarthur and the Australian Agricultural Company, were intended to stimulate the production of a special commodity, such as wool. But these aims were for a long time less important than the desire to strengthen defense, reward friends or public servants, pay debts, dispense patronage or endow religion, all without spending much money.

The relation between sword and plowshare has always seemed intimate and grants of land have frequently been thought a stimulus to martial zeal, a solution of the problems of demobilization and a means for planting defenders at strategic points. Colbert and Talon tried to fortify the Richelieu River zone in Canada by granting seigniories to army officers; Britain offered land, in grants proportional to their position, to any of her officers, soldiers or sailors who cared to stay in America after 1763 and 1783; and after the War of 1812 militiamen were rewarded with assignments of land ranging, according to rank, from 100 to 1200 acres. The desire to strengthen the southern frontier of Lower Canada led to grants of 1200 acres to each member of groups, known as Leaders and Associates, who were willing to settle south of the St. Lawrence. Similar motives influenced policy in Australasia, where, although the defense problem was never so acute as in Canada, there were fears of French or Russian aggression. Ex-soldiers and officers in the infant penal settlement at Sydney could obtain land free; and while the Australasian Land Sales Act of 1842 fixed £1 per acre as the minimum upset price to be paid by civilians it allowed military and naval settlers to obtain free grants. When New Zealand faced its second series of Maori wars after 1860, volunteers were urged to enlist by promises of land carved out of areas taken from

the rebelling natives. Free land played only a minor role in the rewards given those who fought between 1914 and 1918; but at least one state, Tasmania, offered soldiers land worth £100 provided they improved it, and special provision was made for soldier settlements in Canada.

The military were not the only recipients of rewards or of grants on special conditions. In 1670 the Hudson's Bay Company was granted almost all the territory belonging to the middle and west of Canada. In 1763 the governor of Canada was instructed to grant 100 acres of land to every "master or mistress of a family" and fifty acres to every other member of their household on condition that a small quitrent be paid and that three acres be cultivated within three years. Additional grants not exceeding 1000 acres might be made if it appeared that the settler could cultivate the land. The United Empire Loyalists and their children were given 200 acres each as compensation for services and as consolation for sufferings in the American Revolution, and in Upper Canada alone over 3,200,000 acres passed into their hands. Government officials were entitled to grants and in addition special grants were frequently made. Judges, barristers, executive and legislative councilors and their families, clergymen, surveyors, a former bishop of Quebec, the heirs of General Brock, who fell at Queenston in 1812, all received Canadian grants; and 100,000 acres were handed to a "Mr. Cushing and another as a reward for giving information in a case of high treason." In the words of a commission of inquiry of 1830, "The Province of Upper Canada appears to have been considered by Government as a land fund to reward meritorious servants." In addition small grants were made to certain groups of emigrants. The authorities in London and the governor in the colony alike dispensed bounty; and while real settlers had difficulty in securing a plot of ground, the members of the ruling classes and their friends had little trouble in laying a territorial foundation for a colonial aristocracy.

To the military and civil grants given by the state there must be added the ecclesiastical. France had fostered the work of the church in Canada by generous provision of land and England did it even more thoroughly through the clergy reserves. The Constitutional Act of 1791 endowed Protestantism by earmarking an area, in blocks of 200 acres, equal to one seventh of the land granted to laymen. In practise one sixth, not one seventh, of the total area was reserved

and in 1839 it amounted to over 3,000,000 acres in the two Canadas. In Australia religion and education were endowed by the grant of one seventh of each county, but less than 500,000 acres had been allotted when the practise was stopped in 1831. The results of this varied generosity in Canada were revealed by Durham in his report of 1839. About half the surveyed area of Upper and Lower Canada had been given away; only a fragment of Nova Scotia was left, while the whole of Prince Edward Island had been handed over in one day in 1767 to sixty-seven British proprietors provided that they settled people thereon, a condition never enforced or observed. The total Canadian grants probably amounted to about 23,000,000 acres.

In Australia the original plan had been to make small grants to ex-convicts, ex-soldiers and free settlers; in 1793 larger grants were authorized to officers, deserving freedmen and settlers in order to stimulate agriculture and fight famine. But this petty plan, framed to feed a small penal community, broke down when wool production became possible and the large pastoral areas west of the Blue Mountains were discovered. Macarthur wanted 10,000 acres for his sheep ranch; the Australian Agricultural Company got 1,000,000 acres, the Van Diemen's Land Company 350,000. Large scale alienation was begun, and by 1831 nearly 7,000,000 acres had been given away. Wool producers got much of it; religion and education received a little. Newcomers with capital obtained one square mile for each £500 brought into the country; those with scanty means could secure land by residing on it and paying quitrent, while for a time any settler who would maintain a convict for a year was given 100 acres. Favoritism and wire pulling brought land into many strange hands—into the possession of infants, absentees, teachers, ships' captains, public officials and others—but the profusion of grants was not as great as in Canada.

From the end of the 1820's the need for reform of colonial land policy had been apparent, for abuses were preventing real settlement and there was marked disparity between the growth of alienation and that of settlement and production. According to Durham only one tenth of the private lands of Upper Canada and one twentieth of those in Lower Canada were occupied and Prince Edward Island was almost empty. Many grantees had no intention of settling on their holdings: loyalists, militiamen and others were selling their claims for a gallon of

rum or a few pounds and speculators were building up huge estates. The patches of unoccupied private, crown and clergy lands prevented continuous settlement and made difficult the construction of roads or the development of community life. The clergy reserves, as symbols of a favored sect, were hated alike by the Catholics of Quebec and the Protestant dissenters of Ontario. Quitrents were rarely paid; the government received little revenue from the land, and such works as surveying and road making were accordingly hindered.

Land grants therefore gave way to land sales. In 1824 Australian pastoralists were allowed to buy land to supplement their grants: Lower Canada in 1826 and Upper Canada in 1827 announced that no more land would be given away. This rule was applied to Australia in 1831, although for ten years thereafter the law was widely evaded. Over two decades elapsed before the outstanding claims in Canada were liquidated; and only in 1854 was the Canadian Parliament able to secularize the clergy reserves, sell the land and after providing pensions for the clergy dependent on the reserves hand over the money to the municipalities. Australian church lands were sold about the same time. In Prince Edward Island popular sentiment demanded the escheat of the lands held by absentee landlords, but the less violent method of expropriation by purchase was adopted, and the last absentee estate was bought in 1875. In the west the Hudson's Bay Company lost possession of Vancouver Island in the late 1850's and surrendered its claims over Rupert's Land and the Northwest Territories in 1869; but for the latter it received £300,000; and one twentieth of the lands between the Red River and the Rocky Mountains opened for settlement during the next fifty years was reserved to it.

Land sales and theories of colonization became popular at about the same time, and policy from 1830 to 1850 was dominated by the influence of Edward Gibbon Wakefield (*q.v.*). Robert Gourlay in 1822 had propounded a theory of colonization for Canada, and Talbot and Galt had shown how model colonies might be built. But Wakefield's theory was the really powerful force, for it provided a condemnation of land grants, a justification of sales, a program for colony building, an excuse for charging a fairly high price for land, a fund for immigration and public works and a guaranty that a steady stream of labor would be available for colonial landowners. It was put forward at the time that Aus-

tralia was being transformed from a penal settlement to a continent of free settlers and when the need for occupying New Zealand in order to forestall the French was being reluctantly admitted. Wakefield therefore did much to steer the land policy of these two colonies in a direction different from that followed by Canada; the difference became more marked after Britain gave the colonies complete control over their public lands; and while Canada followed the United States in granting land for homesteads, public improvements and education, Australasia kept almost intact the principle that all land must have a price.

Australia and New Zealand had their free land advocates, for that slogan had crossed the Pacific with the gold diggers. When the gold rush subsided, many men wished to become farmers. But Australia by that time had no large fertile areas of empty land left; the "out-back" districts were already occupied by pastoralists who had leased large areas and had the first right to buy any part of their holding at £1 an acre. Governments might bow to popular demand by destroying that preemptive right and by helping the newcomer to find a farm; but few colonial treasurers would agree to surrender land sales as a source of revenue. Hence although Queensland, Western Australia and some New Zealand provinces at times offered free homesteads on the American plan, the general practise was that of sale by instalments at a fixed price or by auction with a minimum upset price. It seemed better to sell the land and put the receipts into the general treasury than to try to dispossess the pastoralist, give away the land and rely on taxation for revenue. For the same reason Australian states were loath to give land to railways. Nevertheless, such grants were made both in Queensland and in Western Australia, where from six to seven million acres were granted for railroad construction between 1881 and 1886. The failure of the companies to dispose of these lands and to work out proper immigration schemes led to a change in policy, and railroad construction and operation became a state enterprise. In New Zealand 4,000,000 acres were granted to the Midland Railway Company, but they were later resumed by the government because the company failed to carry out its contract. Except for the early grants educational costs have been met primarily from state revenue: agricultural and university education have been endowed with sites but otherwise there have been few land endowments. The revenues from 155,480 acres

of crownlands have, however, been set apart for the support of Dookie and another agricultural college in Victoria. Irrigation projects, road construction and soldier settlements are all in the hands of state or federal government departments or of some commission, board or body of trustees; grants of the necessary land are therefore either unnecessary or formal.

Canadian land policy was strikingly different, largely because of Canada's proximity to the United States. The problems of prairie settlement, education and internal improvement were similar to those of the United States and were met in the same way. Canada adopted her neighbor's methods for opening up the prairies; she copied the free homestead system in 1872 and preemption in 1874. In 1880 she gave the Canadian Pacific Railway 25,000,000 acres and \$25,000,000. In later years other railroads received some land, and although in 1896 the dominion government abandoned the making of railroad land grants, some of the provinces continued it: in all, about 47,000,000 acres were given by both the federal and the provincial governments to the railroads. Education had been aided by the endowment of twelve townships in 1798. Finally in 1908 two sections in each surveyed township of Manitoba, Saskatchewan and Alberta were earmarked as school lands; they were sold by auction and the money received was invested to provide an income for school maintenance. But higher and agricultural education received no such large specific grants as were made in the United States.

In other parts of the empire there is little that calls for notice. In Africa grants in return for quitrents, occupation or improvement were common in the early period of settlement. In 1820 and 1821 grants of 100 acres were made to males over eighteen years of age and under this system about five thousand British immigrants were settled in the eastern provinces of the Cape. In 1830 grants were made on the borders of the Cape Colony settlement to about a hundred persons who were to occupy the land themselves and to maintain a number of Europeans capable of bearing arms. The following year further grants on these terms were forbidden but they were revived in the 1850's. In Natal grants were made to missions and churches of various denominations. They were, however, insignificant in size and in 1902 totaled only 149,162 acres. South Africa aided its municipalities by granting them the ownership of land in and near the town; the local authority has certain powers of

sale, by public auction or private bargain, of the leasehold or freehold of these lands, but the direct income from this source is not very large. The same plan has been adopted in Southern Rhodesia since the granting of self-government, and five towns have been given the title deeds of their townlands with power to sell or lease sites for houses. In the tropical possessions land grants have been virtually abolished, and the general practise is to issue leases up to 99 or 999 years with a revision of the rent at regular periods and with penalties for failure to occupy and improve the tenancy.

HERBERT HEATON

LATIN AMERICA. Land grants as rewards or subsidies are a more prominent factor in Latin America than in the territory settled by people of British descent, primarily because the Spanish and Portuguese established themselves in the New World by means of conquest rather than private colonization enterprise. As a result they were much less willing than the British to recognize native landownership, and the aboriginal inhabitants and the lands which they occupied and tilled as well as the undeveloped lands came into the possession of the conquering governments. Moreover, since the rulers of Spain and Portugal, which were strongly organized autocracies, took active part in the discovery, exploration and conquest of America, the land brought into subjection to such powers became virtually a royal patrimony; and as such it could pass into the possession of individuals only by purchase or by grant from the king, either explicitly given or tacitly assumed after long continued occupancy. The grant, known in the Spanish colonies as a *merced* (a grace, or favor), occupied by far the most conspicuous place in the carefully prepared land distribution system followed by the Spaniards in the establishment of their rule in America. The grant had been employed in the recently terminated Moorish wars, and furthermore land, sometimes accompanied by Indian workers, was the only form of material recompense available in most of the areas invaded in the New World. Thus while the grants were intended to assist in the subjection of the conquered territory to Spanish domination, they were in large part mere rewards for services rendered in the conquest. Although repeated attempts were made by the government to protect the lands occupied by the natives, much of this territory as well as unused land was awarded to members of the conquering armies. In a few countries, notably the

Aztec and Inca empires, certain lands had been set aside to be cultivated for special purposes, such as the support of religious institutions, the use of the nobility and the payment of tribute to the emperor. These were classified by the Spaniards as public lands, and it was in part from them that grants were made to individuals.

The authority to distribute land was commonly delegated by the crown. The commander in charge of an expedition usually made the first gifts. As a colony became more completely organized the viceroy assumed the authority or conferred it upon the governor general of a particular province. In some cases the *cabildo* (the local governing body) or the *audiencia* (*q.v.*) assumed or received the authority until a royal decree of November 1, 1591, restricted it to the crown and its direct representatives.

While land was granted most frequently to soldiers and other individuals under the *encomienda* system, which consisted essentially of the assignment to them of Indian villages and the services of their inhabitants, this method was not extensively employed in districts where the Indians were few in number or loosely attached to the soil. Here it was customary to grant only land, the recipient undertaking to introduce the necessary labor. Even in such an area as central Chile, which possessed some well established aboriginal irrigation settlements, these grants were of greater value than the *encomiendas*; and in such almost uninhabited and scantily developed regions as the pampas of Argentina or the plains of northern Mexico they were of course far more valuable. Even in many districts contiguous to well settled centers, such as the old Aztec capital of Tenochtitlan or Cuzco, the queen city of the Incas, the aborigines were so few that land alone was granted.

Where *encomiendas* were not available, the plan was to bestow upon the more deserving among the conquering soldiers or those of higher rank *caballerías* (originally lands for mounted troops), consisting generally of some 500 to 1200 acres of land; those of lower military status were to receive smaller portions, *peonías* (originally lands for infantry), of 100 to 200 acres. In practise, however, not many of the soldiers were content to be relegated permanently to the status of mere peasant proprietors. Every individual, however low his social or military rank at home, had the opportunity of becoming an overlord among the subjugated peoples, and most of them sought and received far larger grants of land than the rules decreed. Those who had partici-

pated in the campaigns customarily received extensive tracts, often containing whole stretches of country running back from some river, lake or shore line for an undetermined distance or perhaps, as was not infrequently the case in Chile, extending to the crest of the mountains which marked the boundary of the province. Since no survey of the country had been made, definite boundaries were generally impossible. Aided by the background of large feudal estates in old Spain, this type of land grant together with the *encomienda* fostered the development of *latifundia* and the consequent oligarchy which has characterized Latin America.

Individuals were also rewarded for founding towns; according to the regulations such founders were to receive one quarter of all the lots. In the late colonial period in Mexico the Spanish settlers, the priest and certain officials were allotted more land than Indian settlers, but holdings were inalienable. Land grants were made not only to individuals—the crown bestowed upon every new town several pieces of land for public use, which were characteristic of the Castilian village: the *fundo legal* was the actual site of the settlement and included space for the central plaza about which every city was formed and for all public and private buildings; the *ejido*, or common, at the exit of the town served for the loading and unloading of carts, mules or human carriers, for a rubbish dump or a slaughterhouse, for games and gatherings; there were also a *dehesa*, or common pasture, for the stock belonging to the inhabitants and a common wood lot, or *montes*, if timber existed near the site. In addition there were the *propios*, which were rented out, and the income from which helped to defray administrative expenses. Because of the general growth of individualism, the demand for land for colonization purposes (as in the province of Buenos Aires in Argentina) and the encroachments of neighboring haciendas (as in Mexico) town holdings have diminished extensively. Nevertheless, some cities still retain their townlands. Quito has its *ejido*; Santiago, Chile, has transformed the old city dump, a survival of its *ejido*, into a park; La Paz uses its *propios* for their original purpose; San Diego, California, now employs part of its pueblo, or townland, for a city hog ranch. As a measure of agrarian reform many Mexican towns of Spanish creation and many more of purely Indian origin, which had lost their holdings, have had their *ejidos* (the term is now applied to the entire common holding) restored and many others have re-

ceived donations of land from the public domain or from expropriated parts of large estates.

In spite of the fact that state and church were closely united in Spain as a result of the reconquest from the Moors and although the conquest of America contained a strong religious motive, few important grants of land made to ecclesiastical agencies appear in the records. When towns were founded, city lots were set apart for churches, convents and hospitals under the control of religious orders. In the minutes of the *cabildos* of Lima and of Santiago, Chile, and in a few other cases there exist records of grants, both of *encomiendas* and of rural lands, to church dignitaries and organizations. Cortés himself endowed, although perhaps from his own possessions rather than from crown holdings, the Hospital de Nuestra Señora de la Concepción in Mexico City as well as schools and convents. In Spain, however, measures had been taken from time to time to check the accumulation of landed property in the hands of the church, which had been for centuries a pressing problem; and the Spanish government now adopted legislation designed to prevent the church from securing possession of extensive property in the colonies, even forbidding those who received grants (of town lots as well as rural properties) to give or sell or otherwise transfer them at any time to any person connected with the church, upon pain of forfeiture. Although these measures were not strictly obeyed, it was uncommon for the church or its institutions to obtain landed properties directly from the crown; most of the vast holdings acquired by ecclesiastical agencies were secured in other ways.

In their colony of Brazil the Portuguese followed a system of land grants very similar to that which prevailed in the Spanish colonies. In 1532 in accordance with a system long established in Madeira and the Azores the territory was divided into 15 sections nominally measuring 50 leagues along the coast and reaching back without bounds into the interior; these were bestowed as *capitanias*, or fiefs, upon twelve court favorites called *donatarios*, who were authorized in turn to make grants to settlers. The political elements of the system did not succeed and were soon supplanted; several *donatarios* forfeited their holdings and by the middle of the eighteenth century all the *capitanias* returned to the crown, which in such cases granted land directly. Nevertheless, the *capitania* system served as the basis of land settlement. *Sesmarias*, or subgrants, were made to persons of social

position or wealth; these holdings were made large, since a sugar cane plantation was thought to require at least 4 square leagues and a cattle ranch 8 or 9 leagues on a side. These extensive estates became the basis of rural property in Brazil and as in the rest of Latin America resulted in *latifundia* and oligarchy, with all their economic and political implications.

By the end of the sixteenth century most of the good land within the reach of the centers of white population had been disposed of or at least had come into the possession of Europeans; the original grants with their indefinite boundaries had been much enlarged by unauthorized encroachments upon Indian holdings or upon unclaimed lands adjoining the grants. When the colonies achieved independence there still existed, however, immense areas of crownlands on all the frontiers, left unoccupied by the gradual expansion of settlement. These lands became the public domain of the new governments or, in the case of the several federal republics, of the constituent states; and once the governmental systems had crystallized into permanent form there arose the problem of how best to dispose of the wealth in unoccupied lands. Various conditions have resulted in the wholesale disposal of the public domain by grant or virtual grant. Many military men had to be rewarded for their services in the wars for independence; and the newly formed governments were hard pressed for funds. At later periods continued frontier conditions, political unrest, straitened public finances, dictatorial government and the inability to supervise distant officials in control of land disposal have favored the land grant system. After the winning of independence the opportunities for population expansion increased, and with the ambition to emulate the rapid economic development of the United States land grants have been made for colonization enterprises and railway building. Grants have also been made with the object of establishing effective occupation of disputed territory. Extensive grants of the public domain have too often been but the expressions of favoritism and privilege. The influence of the oligarchy which grew up on the basis of the colonial land system has persisted: it was but natural, at least during the first half century of independence, that this society should aid in bringing about the disposal of the remaining public lands in large blocks like the earlier grants rather than in the small holdings better suited to be the foundations of the democratic states envisaged in republican constitutions. The social

structure enlarged and perpetuated by this process still persists in most of Latin America.

The public land question was of special importance in Argentina. While in most of the other Latin American countries the more desirable lands had already been occupied, here a large part of the level, fertile area of the pampa remained idle. European settlement in Argentina had come mainly from the west, but it was only after access to the pampa region had been made possible from the Atlantic, and particularly after steam navigation had removed the dangers of the doldrums that lay in the path from the Old World, and when the industrial revolution in Europe had created a demand for the agricultural products of distant countries that there arose a widespread desire for the possession of these potential grain lands. For the first few years after independence the government of Argentina gave away the pampas with lavish hand, rewarding soldiers who had taken part in the war; and provincial governments parted with their lands in much the same fashion. Even the leaders of military bands, the *caudillos*, rewarded their followers with gifts from the public domain. To dispose of unused lands was considered the duty of government. Under the leadership of Rivadavia, however, statesmen came to appreciate more fully the value to the state of the virgin lands, and in 1826 an attempt was made to check this extravagant policy; long leases were planned, aiming at the development of the frontier without the alienation of the public domain. The dictator Rosas (1829-52) returned to the former system; his partisans were favored by frequent grants on the frontier or from the confiscated possessions of his opponents, grants which were usually $6\frac{1}{4}$ square leagues (about 47,900 acres) in extent. While matters improved somewhat after the fall of Rosas, liberal grants of public lands did not cease; in fact they increased during the following years. The frontier was pushed back by wars against the Indians, and politicians and military favorites were "rewarded" by large grants. Under the guise of colonization projects in the new territories extensive grants were obtained also by corporations; some of these were developed as bona fide settlements, but many became merely the holdings of individuals. The government also sold great quantities of land in blocks of 6520 acres at a nominal price. In the territories of Chaco, La Pampa, Neuquén, Río Negro, and in even more distant regions enormous blocks passed into the hands of speculators through grants, concessions

and sale for nominal sums or on partial payments. The homestead and other laws of 1884, 1896, 1907 and 1918 attempted to check this orgy of donation, and a closer governmental supervision of methods used in alienating the national domain has tended to rectify the situation. There remain fewer than 200,000,000 acres of Argentinian lands which have not passed into individual ownership.

Perhaps in none of the other Latin American countries have land grants been so extensive, but in most of them a similar system has been followed. One of the most striking instances is that of Mexico, where during the long presidency of Porfirio Díaz (1876-1910) the disposition of public lands by virtual grant grew to enormous proportions. In response to the desire for a survey of the unoccupied national domain and at the same time in order to stabilize the system of land titles all holdings not duly registered were declared to be a part of the public domain (*baldíos*); it was ordered that all *baldíos* be surveyed and that the surveyor be rewarded with one third of the lands measured. Under this and similar legislation great areas of unoccupied land and much that was occupied without legal title passed into the hands of companies which did little more than proclaim the existence of *baldíos* and carry out a hurried survey. Before the end of the Díaz regime and the beginning of the Agrarian Revolution over 50,000,000 hectares had been given away in this fashion by the government; although some was later recovered, much was permanently lost.

Since most of the railways in Latin America were constructed by the state and are still nationally owned, land grants for the encouragement of railway construction have not been as prodigal as in the United States. In some instances, however, private railway builders have been given land with or without the obligation to colonize it. To Wheelwright, who built between 1863 and 1870 the Central Railway connecting Rosario with Córdoba, the Argentinian government allotted a strip of land 1 league wide along the line; the province of Santa Fé contributed about 90 square leagues. Similar grants were made to the Great Southern line leading into the territory of Neuquén. Bolivia and Colombia have paid for the construction of railways with large concessions of land, as has Brazil, where land has been bestowed upon railway companies in lieu of a guaranteed interest. Most of these grants have been virtual donations, even where it has been provided that the

territory be colonized; and some have not resulted in the construction of railways.

Another form of land grant not uncommon in Latin America has been that made in disputed areas along unsettled boundaries, less with the purpose of creating settlements than with the hope of establishing rights of individuals which might pass for effective occupation and thereby strengthen the claims of the grantor nation to the territory in question. The best example of this is the Chaco district, disputed by Bolivia and Paraguay. Both governments have offered large concessions and have given the map of the Chaco district the appearance of a well subdivided region. Many of the recipients of lands in this district are citizens of foreign nations, and it has perhaps been hoped that their governments would defend their rights. Inasmuch as none of the area has been surveyed and much of it not even explored, it is apparent that such grants are at present largely fictitious and that their purpose is mainly political.

GEORGE McCUTCHEM McBRIE

See: LAND SETTLEMENT; COLONIES; HOMESTEAD; PUBLIC DOMAIN; RAILROADS; AGRICULTURAL EDUCATION; VETERANS; AGRARIAN MOVEMENTS; LAND TENURE; NATIVE POLICY.

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LAND MORTGAGE CREDIT

AGRICULTURAL

General.....FRITZ SCHULTE

United States and Canada.....A. G. BLACK and W. G. MURRAY

URBAN.....MARCUS NADLER

AGRICULTURAL. *General.* Land mortgage credit is a form of investment credit in which realty is pledged as security for the loan. Its function

is to provide agriculture and urban real estate with long term credit. In agriculture long term credit is required in financing the purchase of

land, the construction of farm buildings and the introduction of improved methods of cultivation. Other sources of agricultural mortgage indebtedness are the settlement of inheritance claims and provisions for dowries. This form of credit, not unknown in the Middle Ages and in the period of early capitalism, acquired increasing importance in modern times, when agriculture was drawn into the orbit of capitalistic economy. It assumes additional significance because of the all important position of agriculture as a source of food supply and because of the emphasis placed upon the farming population as a particularly valuable element in the general population of the country.

The sources of farm mortgage credit fall into two major groups: the general credit agencies and the specialized mortgage credit institutions. The first comprises the individual investor, who still furnishes a substantial although a decreasing proportion of farm mortgage credit, the commercial banks, the insurance companies, the savings banks and the various endowment funds, all of which seek profitable but safe investment in farm mortgages. This group of credit agencies, once the dominant source of farm mortgage credit, still continues to furnish the greater part of it, particularly in countries like England and the United States, where specialized farm mortgage credit organization is of recent origin.

In most countries farm mortgage credit tends to concentrate in the hands of the specialized mortgage credit institutions organized in response to the growing needs for mortgage credit and adapted to meet the peculiar requirements of agricultural credit. Almost everywhere these institutions enjoy the support of the government; practically all of them are authorized to finance their loans through bond issues—a device which has proved to be a most effective means of credit mobilization. Some of these institutions confine their operations to farm mortgage credit exclusively; others grant both agricultural and urban land mortgage credit but administer the former in a separate department in view of the peculiar features of agricultural credit. In almost all countries the organization of land mortgage credit has been facilitated by the introduction of a complete system of registration of title with full information as to the nature of obligations resting on land.

An analysis of the mortgage credit institutions reveals several distinct types of organization—cooperative, governmental and private. The first

in point of time as well as in importance is the cooperative association as represented by the German *Landschaft*—the prototype of cooperative credit organization. The first *Landschaft* was organized in 1770 in Silesia and was followed in the succeeding decades by similar associations in the other provinces of eastern Prussia. Their purpose was to provide credit relief to the large landowners impoverished by the Seven Years' War. They were mutual associations of the landowning nobility organized along the lines of the autonomous estates (classes) of the post-feudal society but subject to fairly vigorous control by the state, and they were authorized to issue bonds secured jointly by the mortgaged lands of the members; the valuation of the land, most minutely prescribed and standardized, was performed by designated members as an honorable duty. Loans were made in the form of bonds, which the borrower had to dispose of in the market. The system of lending bonds permitted the granting of credit whenever there was sufficient security for it without regard for conditions obtaining in the capital markets. Since the *Landschaft* provided for direct substitution of the credit of a group of large landowners for that of its individual members it was particularly effective as an aid in retaining landed property in the hands of its original holder. The rate of interest on the bonds was roughly from 3 to 4 percent, and they were almost as marketable as government securities. Nevertheless, the fluctuations in their market quotation caused frequent hardship to the borrower, which the *Landschaften* tried to relieve by establishing banks of their own to deal in bonds. The post-war credit crisis forced them to abandon the bond loan system in favor of the cash loan system, which permits a better timing of the issue to the conditions obtaining in the capital markets and greater flexibility in interest charges on individual loans and in methods of their repayment. Although essentially private institutions the *Landschaft* associations were authorized by the government to assume certain administrative functions, such, for example, as the right to institute receivership without recourse to court action in case of default in payment or of impairment of the mortgaged estate.

Originally the *Landschaft* associations restricted their membership to the landed nobility, but under the liberalizing influences of peasant emancipation in the nineteenth century some *Landschaft* associations began to extend their credit facilities also to peasants either by admit-

ting them to membership or by establishing subsidiary institutions, so-called *Landschaften für Kleingrundbesitz*, offering the peasants the same type of credit which the mother institutions offered to the noble landowner.

The *Landschaft* associations were readily transplanted to the neighboring areas where the mediaeval tradition of landed estate survived—such German states as Hanover, Mecklenburg and Brunswick, the Russian Baltic provinces, Finland, Russian Poland, Galicia and Hungary. The system, however, proved inapplicable where small and medium sized farms were the dominant form of landownership. In some of these regions, such as Saxony and Bavaria, ordinary credit cooperatives, particularly well suited to short term credit requirements, were adapted to serve the needs of long term credit as well. In Denmark there exists a vast network of such cooperatives. In Belgium the Caisse Centrale de Crédit organized by the Boerenbond is cooperative in principle. In France the large system of cooperative rural credit societies which engaged primarily in short term credit operations was authorized by the government to grant also long term loans to small farmers from public funds assigned to them for this purpose. The cooperative principle was incorporated to a limited extent in the Federal Farm Loan system in the United States. In India a number of cooperative land mortgage banks were established after 1928 at the recommendation of the Royal Commission on Agriculture.

Where small and medium sized landholdings predominate and the cooperative principle has not gained a foothold in the organization of farm mortgage credit, the function of supplying this form of credit was taken over by the state. Government assistance took the form of establishing special public credit agencies or of providing a government guaranty of the bonds issued by private institutions, the latter being subject to a high degree of public control. In Ireland the great mass of tenants have been turned into proprietors with the aid of long term credit advanced from public funds. The State Nobles' Land Bank and the Peasants' State Bank in imperial Russia furnished credit relief to the landowning nobility and facilitated the outright purchase of land by the peasantry. In the smaller states of Germany many of the institutions which were originally organized in the period of peasant emancipation for the purpose of financing the commutation of feudal charges evolved into public mortgage and savings institutions (*Land-*

deskreditkassen), while in the western provinces of Prussia public land banks (*Landesbanken*) grew out of credit institutions established by provincial and local governments. Public credit institutions or private companies with public guaranty exist also in Czechoslovakia, Yugoslavia, Bulgaria, Greece, Italy, Sweden, Norway, Switzerland, the principal countries of Latin America, Persia, Turkey, South Africa, New Zealand and in the states of the Commonwealth of Australia. In some of the Australian states the savings banks which had been doing general banking business, including short term farm credit, provided a starting point for the development of a long term credit system. In Austria, where the private mortgage companies succumbed to the agricultural crisis, the provincial mortgage institutions (*Landeshypothekenanstalten*) are at present the sole source of mortgage credit, agricultural as well as urban.

In advanced capitalistic countries the typical mortgage credit institution is the private mortgage company, owned and controlled by the private stockholders and operated on a profit basis. The principles underlying the operation of this type of institution—share capital, grant of long term loans on agricultural and urban land without restriction as to type of owner or locality, sale of bonds based on land mortgages in the open market—were first applied on a large scale by the Crédit Foncier of France, which was organized in 1852. Because of the monopoly privilege which it enjoyed in the first twenty-five years of its existence and the considerable financial assistance it obtained from the government during its early years the Crédit Foncier was until recently the only important mortgage credit institution in France. The private mortgage company is found in Belgium, Holland, Switzerland, Germany, Spain, Portugal, the United States and Japan. In England, where no farm mortgage credit organization existed before the World War because of peculiarities of land tenure, a private mortgage company was entrusted in 1928 with the task of providing long term credit facilities to the growing number of tenants with aspirations for farm ownership. The Agricultural Mortgage Corporation is owned by the Bank of England and the large joint stock banks, and the branches of the latter act as the local agencies of the company. This differs from the usual type of private mortgage company in that the government advanced a sum of money as a guaranty fund of the corporation. The activities of the corporation are confined to England and

Wales; no similar system has been established in Scotland.

Another type of private mortgage organization is the central mortgage bond institution affiliated with a number of savings banks. It developed chiefly in the territories of former Austria-Hungary and survived in the succession states; it also exists in Italy, where the *monti di pietà* in Turin, Milan and Siena evolved into autonomous mortgage bond institutions. This type of organization is based on the principle of separating the function of granting loans secured by mortgages from the function of the issue of bonds on the basis of the mortgages thus obtained. The underlying idea is that the granting of a loan involves intimate knowledge of the conditions of the property which is to be mortgaged and consequently requires a decentralized form of organization, while the successful floating of a bond issue depends upon the confidence of the money market in the issuing organization and is probably greater when the bonds are issued by a central institution. A limited application of this principle is found in the organization in 1873 of the Preussische Zentrallandschaft, which was authorized to issue bonds on the basis of the mortgage or bond portfolio of the member *Landschaften* without, however, abrogating the right of issue of the individual associations. This principle was also incorporated in the organization of the mortgage credit institutions of Sweden and Norway and in the mortgage banks which are common in France, Switzerland, Belgium and Holland, which are of considerable importance in the development of oversea plantations. More recently it has been applied in Switzerland, where two mortgage bond institutions, the Pfandbriefzentrale der Schweizerischen Kantonalbanken (1931) and the Pfandbriefbank Schweizerischer Hypothekeninstitute (1930), were recently established for the purpose of financing mortgage credit through the issue of long term bonds, thus supplementing the cantonal banks as well as private mortgage companies which finance their operations through debentures of intermediate maturity. The individual banks participate in the administration of the central institutions and add their guaranty to the mortgages, which are used as a basis for the bond issue.

The principle of separating the mortgage loan business from the issue of mortgage bonds was of special importance in attracting foreign capital to impoverished Europe after the World War. The destruction of capital during the war

and the economic disorganization in central and eastern Europe which followed the war resulted in an unusual shortage of credit facilities. This credit hunger was accentuated by the upsurge of agrarian reform with the resulting division of large estates among the landless and small peasantry, who, however, were without means of paying the required compensation or of purchasing the necessary equipment. In Germany the situation was partially remedied by the organization in 1925 of the Deutsche Rentenbank Kreditanstalt, which floated loans by means of a bond issue in the United States totaling \$131,000,000 during the years 1925 to 1928 and also contracted an intermediate loan in the form of mortgage bonds bearing 7 percent interest from the Deutsche Golddiskont Bank. The proceeds of the loans were placed at the disposal of German agriculture through the various mortgage credit institutions. In countries where the open money market was unable or unwilling to furnish the funds required for the liquidation of debts and for the restoration of normal conditions the government frequently had to provide direct subsidies. Thus in 1928 France appropriated 500,000,000 francs for intermediate credit and 250,000,000 francs for long term credit to be distributed through the rural credit societies. It was but natural that the governments made use of the existing credit apparatus for the distribution of the funds supplied. Since conditions have required intervention in the field of short as well as long term credit, the rigid separation of the two forms of credit formerly customary in banking has been largely eliminated with a view to assisting the small peasant.

A new departure in providing impoverished countries with credit facilities is the projected International Agricultural Mortgage Bank under the auspices of the League of Nations. The project is advocated chiefly by France and by the southeast European countries. The institution, to be organized as a joint stock company, is to grant amortizable long term and intermediate credit to the national institutions engaged in granting farm mortgage credit in their respective countries. It is to obtain capital by issuing bonds secured in turn by the mortgage collateral of these national institutions. Although the establishment has been decided upon in principle, its actual operation has been delayed pending the ratification of the agreement by the interested governments.

Variants of land mortgage credit are credits for the purpose of facilitating certain types of

improvement and encouraging land settlement (*q. v.*). These credits are different from the usual form of farm mortgage credit in that the granting of the loan is usually conditioned upon the use to which it is to be put and the disposition of the funds is carefully supervised by the credit institution or by the government agencies. In England the organization of improvement credit dates back to the 1840's, when a series of land improvement acts was passed providing appropriations for the granting of credit for drainage. Subsequent legislation broadened the range of improvements entitled to credit grants. Since 1929 improvement credit has been administered by the Agricultural Mortgage Corporation, which is also the institution for general farm mortgage credit. The loans are granted only after a thoroughgoing investigation by the Ministry of Agriculture of the conditions of the property and the need for improvements. The obligation created on the land enjoys priority over all other claims. In Germany settlement and improvement credit has entailed the establishment of special institutions, as this form of credit could not be fitted into the general organization of farm mortgage credit. In Prussia settlement credit has been handled since 1891 by the Rentenbanken, which were consolidated into the Preussische Landesrentenbank in 1927. The latter is a public institution authorized to issue bonds. In 1924 the federal government also took over all the shares of a central institution, the Deutsche Bodenkultur A. G., which had been organized in 1923 to provide improvement credit, which was formerly taken care of by the local Kulturrentenbanken in various parts of the country. In few countries, however, are improvement and settlement credits as rigidly separated from the usual farm mortgage credit as in Germany. Legislation in recent years has tended to encourage the consolidation of settlement and improvement credit institutions with those furnishing general mortgage credit for agriculture.

FRITZ SCHULTE

United States and Canada. Agitation for improved agricultural credit facilities in the United States has persisted since the colonial period. Early reforms growing out of the prevailing shortage of capital consisted of the establishment of land banks, public and private, which were authorized to issue bills of credit secured by land (*see LAND BANK SCHEMES*). In the early nineteenth century the rapidly developing southern

states led in the establishment of private and state owned banking institutions designed to offer credit facilities to planters and farmers and authorized to finance their loans through the issue of bonds and notes. While some of these institutions provided a real stimulus to expanding agriculture, most of them were short lived and practically all succumbed to mismanagement, reckless expansion and recurrent financial panics. The early commercial banks, some of which were required to lend a percentage of their funds to agriculture, played an important role in stimulating agricultural expansion of the frontier. Commercial banks, however, proved ill adapted to supply long term credit and with the introduction of the national banking system in 1863 the national banks were prohibited from lending on real estate. Meanwhile the settlement of the middle west, the gradual exhaustion of free land, the growth of population and consequent rise of land values and the mechanization of agriculture increased the long term credit requirements of agriculture and accentuated the inadequacy of the general credit institutions. Dissatisfaction with the existing facilities and agitation for farm credit reform were general throughout the latter part of the nineteenth century and the early part of the twentieth.

The basis of the sustained agitation was the fact that the farmers, separated by long distances from the money centers, were dependent for the most part on local lenders, who because of the scarcity of capital occupied an almost monopolistic position in the credit market. Interest rates were consequently high, and the cost of credit was further increased by the expenses involved in bringing lender and borrower together and in appraising the land as well as by the short term loans running from one to five years, which necessitated frequent renewals and involved the payment of onerous renewal commissions. The loans as a rule lacked provisions for amortization; and the practise of having the entire principal of the loan come due at once proved an additional source of embarrassment to farmers, particularly when the maturities coincided with recurring periods of agricultural depression.

In response to repeated demands for action provision was made by Congress for a nationwide study of the land mortgage situation in connection with the 1890 federal census. This was the first authoritative report on the extent and distribution of farm mortgage indebtedness and gave support to the contentions of those seeking land mortgage credit reform. In 1908

President Roosevelt appointed the Country Life Commission to study farm conditions; in its report this body stressed the need for improvement in the farm credit field. In 1913 the American Commission on Agricultural Cooperation in Europe which was sponsored by southern business men and the United States Commission authorized by Congress surveyed the organization of agricultural credit and cooperation in Europe and returned with a comprehensive report. The same year witnessed the liberalization of the national banking system by federal reserve legislation which permitted national banks to advance loans on real estate to a limited extent.

The century long drive for more adequate mortgage credit facilities culminated in the passage in 1916 of the Federal Farm Loan Act, which provided for the establishment of the Federal Farm Loan system consisting of semi-cooperative Federal Land Banks and private joint stock land banks (*see* FARM LOAN SYSTEM, FEDERAL). Despite the improvement of land mortgage facilities effected by the Federal Farm Loan system the farmers of the newer agricultural areas felt that these facilities were inadequate. Farm mortgage institutions patterned after the Federal Farm Loan system were organized in three states. In 1917 a law was passed in South Dakota providing for a state farm mortgage bank; a similar law was enacted in North Dakota in 1919 and in Minnesota in 1923. Funds were obtained by the sale of bonds secured by farm mortgages but guaranteed by the state. These states have found mortgage lending unsatisfactory because of a combination of incompetency, political pressure, unprosperous agricultural conditions and, in the case of South Dakota, fraudulent practises. None of these state systems is now actively lending funds. Many states have provided that school and other trust funds be loaned upon land mortgage security.

Farm mortgage indebtedness in the United States increased until 1928. The census of 1890 shows that the mortgage debt in force on acres and not on lots was \$1,292,000,000 in 1880 and \$2,209,000,000 in 1890. Recent estimates list the total farm mortgage debt at \$3,320,000,000 in 1910, \$7,857,700,000 in 1920, \$9,468,526,000 in 1928 and \$9,241,390,000 in 1930. The ratio of indebtedness to the total value of farm lands and buildings was 9.5 percent in 1910 and 11.8 in 1920. The average rate of interest on outstanding loans in 1920 was 6.1 percent, ranging from 5.1 percent in New Hampshire to 7.8 percent in

Arkansas. In recent years there has been a tendency toward lower and more equal rates. The large increase in indebtedness between 1910 and 1920 resulted from the rise of land values, which was accompanied by a more than ordinary amount of land purchase activity. The fact that the debt was larger in 1930 than in 1920 is particularly depressing in view of the marked decline in the value of land during this decade. This has meant the loss to many farm owners of whatever equity they may have had in their land. While statistics as to the percentage of farms mortgaged are not complete, there is evidence to show that such farms increased between 1910 and 1930. The expansion in the debt in these years, however, has been chiefly the result of heavier loans per acre with only a minor addition arising from the mortgaging of land previously debt free.

Much of the farm mortgage credit needed by agriculture in its westward movement across the continent was furnished by former owners, who usually granted the purchaser an extension of time on a portion of the purchase sum and took a mortgage on the farm as security. In the 1880's and early 1890's there was a considerable growth of farm mortgage companies. These agencies were created to satisfy the demand of investors in eastern states for farm mortgages from the agricultural states of the middle west. Instances of 10 percent interest to the investor and 10 percent commission to the mortgage company negotiating the loan provided the necessary stimulus for this development. The business was overdone, however, and the depression of the middle 1890's caused many companies to fail. With the turn of the century insurance companies came into prominence as a source of farm mortgage credit. According to reports concerning companies with over 90 percent of the assets of all legal reserve companies they had \$268,658,000 invested in farm mortgages in 1906, \$1,085,966,000 in 1920 and \$1,916,000,000 in 1929. An estimate for all companies in 1929 is \$2,000,000,000. From 1920 to 1928 the rise in farm mortgage holdings of insurance companies represented a shift of previously incurred mortgage debt from individuals and banks to insurance companies.

According to a recent study by the United States Department of Agriculture insurance companies held 22.9 percent of the total debt on January 1, 1928, individual investors 15.4 percent, Federal Land Banks 12.1 percent, commercial banks 10.8 percent, retired farmers 10.6

percent, mortgage companies 10.4 percent, joint stock land banks 7 percent and a miscellaneous group the remainder. One reason cited for the large holdings of insurance companies is their preference for mortgages on middle western properties, which are above the average in size because of the higher land values in that region. Individuals and commercial banks are the largest farm mortgage lenders in the north Atlantic coast region and along the Pacific coast.

In Canada the organization of farm mortgage credit followed essentially the same lines of development as in the United States. Private investors and former owners have probably been the holders of the largest amount of farm mortgages, although the precise amount of such holdings is not known. Since as early as 1841 chartered banks were prohibited from making loans on real estate security, loan companies developed to supply the demand for credit on farm and urban real estate. The first incorporated loan company was established in 1844, and special legislation was enacted in 1846 to encourage the formation of such companies. Complete data on the operations of these companies are not available, but a report for 1929 lists their total assets at \$206,596,109. Sales of debentures and savings deposits provide these companies with funds to lend on mortgage security. Life insurance companies also are an important source of farm mortgage credit; in 1930 the Department of Agriculture of Canada estimated the amount of farm mortgages held by them at \$74,000,000.

As in the United States there were urgent demands in Canada for more adequate farm mortgage credit. The first successful legislation to provide additional mortgage credit was enacted in the provinces of New Brunswick and Nova Scotia in 1912. These acts aimed at encouraging the settlement of land, and one of their features was the provision for purchase of vacant farms and their sale on credit to farmers. By 1917 six provinces had established systems of farm mortgage credit, Quebec and Ontario being the only two provinces without state agencies. From 1912 to 1931 a total of 22,168 loans, amounting to \$66,550,000, was made by the six provincial systems. Ontario's farm loan bank took the lead with 11,775 loans aggregating \$43,113,000, followed by Saskatchewan with 5673 loans amounting to \$14,455,000. These provincial loan banks with long term amortized loans resemble in many respects the Federal Farm Loan system in the United States.

In 1927 a dominion system of farm mortgage

credit was provided for by law, and in 1929 the Canadian Farm Loan Board was organized to administer the act. The dominion government subscribed an initial capital sum of \$5,000,000 free from interest for three years but subject to a rate of 5 percent after the expiration of that period. By March 31, 1931, a total of 3423 loans in six provinces had been approved for an aggregate of \$7,563,650. The dominion system now operates in the following provinces listed in the order of the number of loans made: Alberta, Quebec, British Columbia, New Brunswick, Nova Scotia and Manitoba. With the exception of that of New Brunswick provincial systems ceased operations when the dominion board commenced lending. Loans are amortized over a period of twenty-three or thirty-two years, and funds are obtained by issuing bonds. The interest rate on loans is based on the amount needed to pay interest on the bonds and to cover the costs of administration.

Of all the handicaps agriculture has met in developing a satisfactory farm mortgage system the problem of defaults arising from extreme variations in farm income has remained, at least in part, unsolved. Each depression period results in the bankruptcy of many farmers who have undertaken ownership and are forced back into tenancy. In the 1870's and the 1890's and again in the agricultural crisis after the World War prices of farm products dropped to unusually low levels and the number of foreclosures of farms increased. The United States Department of Agriculture has estimated that for the period 1926 to 1931 foreclosures and defaults exclusive of sales for taxes amounted to an annual average of seventeen out of every thousand farms in the country. Research in the field of land appraisal has thus far not thrown much light on the best means of safeguarding farm loans from the necessity of foreclosure. The common policy of lending 50 percent of the appraised value is not a solution because of the erratic fluctuations in farm income and farm values. The frequent failure to recognize the temporary character of boom values of agricultural land and products saddles the farmer with a burden of indebtedness which he is in no position to throw off when the pendulum swings in the other direction. While the problem of agricultural indebtedness is a phase of the general problem of the crushing effects of deflation on the status of the debtor, the application of more careful appraisal methods based on earning capacity over periods long enough to include both high and low levels of farm income

would mitigate considerably the severity of the foreclosure epidemics which attack agriculture.

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URBAN. As in agriculture the long term credit needs of urban real estate were originally supplied by individual investors, commercial banks and general investment institutions. With the rapid industrial development of the nineteenth century, accompanied as it was by growing urbanization, the credit needs of real estate expanded enormously, leading to the early establishment of special credit institutions designed primarily to meet the peculiarities of urban land mortgage credit. These institutions, which developed first in Europe, particularly in France and Germany, are now found in most countries. They fall into three main groups: those owned and controlled by the national or local governments, those operating on a cooperative basis and those owned by individual stockholders and operated for private profit.

Mortgage institutions of the first group are usually engaged in granting urban as well as rural mortgage credits and their operation is entirely in the hands of the government; the State Mortgage Bank of Yugoslavia is a good example of this type. While the bonds are the direct obligations of a specific institution secured by first mortgages they are as a rule unconditionally guaranteed as to principal and interest by the government. Some institutions of the second group are concerned primarily with the financing of rural mortgages, while others, such as the *Stadtschaften* in Germany, engage exclusively in urban real estate financing. The *Stadtschaften* are mutual associations of owners of real estate patterned somewhat after the *Land-schaften*; they grant mortgage loans to their members only on urban property used for residential purposes. On the basis of these mortgages they issue their own bonds, which were formerly turned over to the borrower; but since this method often involved selling the bonds at a discount and thus depressing their value it has been abandoned in favor of the cash loan principle. In 1922 the local *Stadtschaften* in Prussia organized the Preussische Zentralstadtschaft in order to standardize and centralize the bond issue and thereby enhance the attractiveness of this form of investment. The actual lending is still in the hands of the local *Stadtschaften*, but the central organization has the sole right to issue bonds secured by the mortgages of the local in-

stitutions, among which they are then distributed. Any *Stadtschaft* is allowed to join the central organization, whose membership has increased considerably since 1926. The *Stadtschaften* operate under close government supervision, and their bonds are usually guaranteed by local or municipal government. Cooperative mortgage banks are often affiliated with a central mortgage bank, to which they may turn over their bonds. The central mortgage bank then issues and sells its own bonds, which are secured by those of the cooperative banks. The private mortgage banks, constituting the third group, engage chiefly in financing urban real estate and exist in practically every capitalist country, although the degree of government supervision differs. The best known privately owned mortgage bank is the *Crédit Foncier* of France.

The underlying principle of long term mortgage banking credit is the same in every type of institution. It involves the pooling of individual mortgages by a mortgage bank and the issuance by the latter of bonds secured by these mortgages. The bonds are at the same time the direct obligations of the institution. The advantages offered by such an institution are obvious. If the mortgage were to be turned over to an individual, he would have to carry the entire amount. Through the issue of mortgage bonds the amount is split up into smaller units and distributed to a large group of investors. Furthermore the security of the bonds is based not on one but on many properties, so that the risk is diversified and the credit standing of the bonds improved. Since bonds of mortgage banks, particularly in Europe, are listed on the leading stock exchanges they find a ready market among investors, institutional as well as private. The development of mortgage banks has therefore tended to attract considerable amounts of capital to the financing of real estate which could otherwise not have been obtained. As a matter of fact bonds of mortgage banks, urban as well as rural, were considered before the World War as first class investments and were freely used for the investment of trust funds; such bonds were sold in many countries even at a lower yield than government obligations.

The operation of the three types of mortgage banks described is essentially the same. The bonds in most cases are secured by first mortgages on urban real estate usually representing between $33\frac{1}{3}$ and $66\frac{2}{3}$ percent of the appraised value of the land. In some countries the appraisal is left to the individual institution, while in others

it is under government supervision and carried out by specially appointed appraisers. In most countries, however, the evaluation of the property is regulated by law. Bonds of mortgage banks operating on a cooperative basis are at times the joint and several liability of the individual members of the bank, although in recent years there has been a general tendency to eliminate such liability on the part of the members. Bonds of all types of mortgage banks in Europe always carry amortization clauses which provide for the payment of a semi-annual or annual sinking fund large enough to retire the entire loan during a period ranging from thirty to forty years, although the *Crédit Foncier* of France may make loans for a period of seventy-five years.

From their early stages mortgage banks in Europe have been under government supervision, primarily in order to protect the bondholders and to facilitate the flow of capital into urban and rural mortgages. Government supervision applies not merely to government owned and cooperative institutions which operate under special laws but also to private corporations which are owned by stockholders and operate chiefly for profit. In Germany the organization and any change in the regulation of a private mortgage bank operating throughout the Reich must be approved by the Reichsrat. If the business of the mortgage bank is restricted to one state, the changes must be approved by the authorities of that state. Each mortgage bank has a trustee appointed by the supervisory authorities, whose function is to see that the mortgages which form the security for the bonds are equal in amount to the bonds issued. The trustee is authorized to examine the books and records of the banks and to obtain as much information as he desires.

In most countries of Europe the foreclosure proceedings in case of default by the borrower have been greatly simplified, thus adding considerably to the security of the bonds. The records of the mortgage bank usually constitute the only necessary legal evidence of the debt, and the court upon determining the authenticity of such records must render judgment in favor of the bank and order the sale of the property. Where mortgage banks are closely supervised by the government, as in Germany and the Scandinavian countries, mortgage banks have operated successfully without loss to investors and before the World War were able to furnish capital for real estate purposes at a comparatively low cost.

The cost of borrowing from government owned and cooperative institutions is not high and depends entirely upon the status of the capital market. Thus in post-war years the yield on mortgage bonds in Germany was almost twice as high as before the war. The spread between the rate of interest charged the borrower by these institutions and the rate of interest to the bondholder is between $\frac{1}{2}$ to 1 percent, this difference being used to meet the overhead expense of the mortgage bank and to build up statutory reserve funds. In some cases the bonds issued by mortgage banks operating on a cooperative basis bear the same rate of interest as the mortgages by which they are secured, the members contributing usually $\frac{1}{2}$ percent per annum to defray costs of administration. Similarly in most European countries the rate of interest which the borrowers pay to private mortgage banks has a definite relationship to the rate which the bonds bear and is usually about $\frac{1}{2}$ to 1 percent higher.

Most mortgage banks in Europe are engaged primarily in the granting of first mortgages. It is expected that the difference between the amount of the first mortgage and the cost of the building will be borne by the entrepreneur or by the owner of the building. Second mortgages are generally not handled by cooperative institutions or by institutions whose bonds are unconditionally guaranteed by the government. In some countries, however, as for example, in Denmark, the *hypothekforeninger* (mortgage associations) engage exclusively in lending on second mortgages. In Germany many *Stadtschaften* are authorized to lend on second mortgages up to 80 percent of the value of the property. Private mortgage banks are in some instances permitted by law to engage in the granting of loans on second mortgages.

In the United States unlike most European countries urban real estate mortgage credit is not concentrated in the hands of specialized institutions but is carried out by different types of organizations. Most prominent among these are: title and guaranty companies, mortgage and bond companies, building and loan associations, insurance companies, savings banks, commercial banks and charitable and educational institutions. Only the first three specialize in the granting of mortgage loans on urban real estate. Title companies operate along the same lines as private mortgage banks in Europe; they grant loans only on first mortgages and sell them or the bonds based on the mortgages with their

own guaranty. They are under state supervision, and their operations have been conservative. Mortgage and bond companies which do not guarantee the mortgages and bonds sold by them have at times been careless in their appraisal of properties and the consequent losses sustained by investors have been staggering. With the exception of mortgage and bond institutions and investment houses practically all other types of institutions engage primarily in the lending of first mortgage loans. With the exception of the building and loan association all other institutions operate chiefly for private profit; hence the cost of real estate financing is higher in the United States than is warranted by the prevailing conditions in the capital market, comparing unfavorably with that of countries like France and Switzerland. Moreover the cost of mortgage financing is not uniform because of the various charges and commissions paid to mortgage brokers and others. The business of lending on second mortgages, which is much more in vogue in the United States perhaps than in any other country, is left to individuals and mortgage institutions. The cost of placing second mortgages in the United States is exorbitant. While the nominal rate of interest is comparatively low, the special charges and bonuses which have to be paid by borrowers bring the cost up to from 10 to 15 percent and often more.

The urban mortgage credit system in the United States is marked by a lack of concentration and specialization, a lack of amortization provisions and the absence of government supervision. The non-existence of central institutions ready to discount mortgages and mortgage bonds has made the latter a less marketable and consequently a less attractive investment in the United States than in other countries. This becomes particularly evident in times of depression, when holders of mortgages, such as commercial banks, savings banks and insurance companies, are unable to convert their mortgages into cash. Although in recent years a Real Estate Security Exchange has been established in New York, its operations are limited and comprise few securities. The fact that in most cases the mortgages run only for a period of from three to five years without amortization provisions makes it often difficult, particularly in times of falling real estate values, to renew the mortgages at the outstanding amount, thus resulting often in foreclosures and in loss of the equity of the owners. Finally, the absence of government supervision frequently invites unscrupulous practises on

the part of mortgage institutions. The unprincipled method of appraising the property at a rate higher than the actual market value has frequently resulted in heavy losses to investors and has brought certain real estate mortgage bonds into disrepute. All these factors obviously add to the cost of urban real estate financing.

The weakness of the urban mortgage credit system in the United States has again been evidenced in the business depression following the autumn of 1929. The decline of business activity was accompanied by a sharp reduction in real estate values and rentals. These factors coupled with the unsound practises of some mortgage companies, especially of those which did not guarantee the mortgage bonds distributed by them, resulted in a large number of defaults of such bonds. While accurate statistics on the total amount of urban real estate mortgages and mortgage bonds are not available, the National Association of Real Estate Boards has estimated that out of \$18,000,000,000 in real estate mortgages outstanding in this country more than \$4,000,000,000 was in default. Other estimates would place the total value of outstanding mortgages as high as \$25,000,000,000 and the defaults proportionately larger. A departure from the usual practise of forming separate committees for the purpose of reorganizing the capitalization of a property whenever the bonds of such property have gone into default is offered by the formation, among others, of the General Committee for the Protection of Real Estate Bondholders in 1932, composed of persons who have had no connection with the marketing of such securities. Although the committee's aim is primarily to safeguard the interest of the holders of mortgage bonds distributed by S. W. Straus and Company, the largest company of its kind, it may at its discretion accept deposits of other securities. The work of the committee, manned by an independent and disinterested group of nationally known citizens, will include an investigation into the conditions under which the bonds have defaulted and may lead to sounder practises in the issue and distribution of real estate bonds.

The partial collapse of the real estate market during the depression has brought into sharp relief the need for a thorough overhauling of the urban mortgage credit system in the United States. The National Association of Real Estate Boards has recommended the creation of a Central Urban Mortgage Rediscount Corporation, to be patterned after the systems prevailing in Europe. The passage of the Federal Home Loan

Bank Act in 1932 marks a more concrete step in the direction of an organized urban mortgage credit system. The act calls for the establishment of an independent system of eight to twelve Federal Home Loan Banks to operate under the supervision of the Federal Home Loan Bank Board. The banks, whose original minimum capital of \$134,000,000 is to be subscribed temporarily in part by the Treasury, are to offer rediscount facilities to building and loan associations, savings banks and other institutions engaged in the granting of mortgage loans on urban real estate. This law limits the rediscount facilities of its members to mortgages on real estate, the value of which does not exceed \$20,000. If the mortgage runs for more than eight years then the advance made by a Home Loan Bank to a member may be up to 60 percent of the unpaid amount of the mortgage; if for less than eight years, then only to 50 percent. In the first case, the advance may not exceed 40 percent of the appraised value of the property mortgaged; in the latter case, 30 percent. While this legislation is a step in the right direction, its effectiveness will obviously be limited to a fraction of the urban mortgage business. The application of similar measures of centralization, coordination and government supervision to the vast field of industrial and commercial real estate finance would contribute greatly to the stability of the industry.

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See: CREDIT; AGRICULTURAL CREDIT; CREDIT COOPERATION; FARM LOAN SYSTEM, FEDERAL; BUILDING AND LOAN ASSOCIATIONS; FINANCIAL ORGANIZATION; INVESTMENT; LAND VALUATION; REAL ESTATE; MORTGAGE; HOUSING; HOME OWNERSHIP; LAND SETTLEMENT; LAND BANK SCHEMES.

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LAND NATIONALIZATION. See SOCIALIZATION; SINGLE TAX.

LAND REFORM. See SOCIALIZATION; UNEARNED INCREMENT; SINGLE TAX.

LAND REGISTRATION. See LAND TRANSFER.

LAND SETTLEMENT. The entire course of human history has been essentially one of struggle for dominion over the earth's surface. Even in earliest times primitive man migrated to new

areas, lured by the spoils of conquest or the larger opportunities of unoccupied territory. Land was a common possession of the particular tribe or people which for the moment held dominion over it. Where the route of human migrations can be followed there is usually disclosed a well defined movement from east to west. Thus the center of civilization shifted throughout the centuries, slowly but steadily, from Asia to the shores of the Mediterranean and the Atlantic. This movement was halted temporarily by the ocean barriers, until Portuguese, Spanish and English seafarers revealed to an awakening Europe the existence of theretofore undreamed of continents. The area of land thus made available for colonization was so vast that the question of ownership and settlement became a world problem. The fact that all these lands were already peopled, owned and used in a manner suited to the primitive life and habits of the aborigines was wholly ignored. Ownership by right of discovery was asserted as a guiding principle, and this placed in the hands of the rulers and governing classes a new source of potential wealth and power.

In the nineteenth century a new and potent influence began to assert itself, as a result of which land settlement largely ceased to be a political factor in civilization and became more and more an economic and social one. This influence comprised the manifold and marvelous discoveries in science and their application to industry. The first result of these discoveries was to enhance the comforts and enjoyments of life and multiply the desires of man. This created new industries and new fields for labor. The intelligent and aspiring were migrating. What could be done to make life on the land sufficiently appealing to hold its people who would be not only good farmers but supporters and directors of those things which make for stable government and attractive life? The effort to meet these needs has brought about the greatest agrarian advance in all history.

In widely separated countries of Europe, North and South America and Australia this type of land settlement was not dealt with as a public matter until it became manifest that non-resident ownership and tenant cultivation were dangerous sources of social and political unrest and constituted a threat to national security. In Europe the peasant who wanted to own his farm but was unable to do so because of laws which were an inheritance from the past was leaving for the city or for other countries where land

was cheap or the conditions of purchase favorable. So many of the people in the rural districts were migrating and so many of those who remained were restless and discontented that some means of changing conditions was essential to national efficiency if not to national survival. On the other hand, in the new lands of Australia and Canada, for example, agrarian settlement had proved to be disappointingly slow because of such natural obstacles as insufficient rainfall and because of inadequate credit, marketing and transport facilities.

The result in the last quarter of the nineteenth century was the evolution of a system of directed land settlement or internal colonization. In lands on the pioneer fringe which had not yet been broken to the plow as well as in countries where the cultivation of the soil had had a continuous history there developed a series of governmental policies aiming at permanent settlement and redistribution of agricultural lands. These public programs while varying in detail have had certain essential characteristics common to all the countries in which they have been adopted. First, there was usually to be found a provision for enabling farmers to enter into possession of land with only a nominal payment, thus leaving the greater part of their own funds available to pay for improvements and equipment. Second, there was created an organization, either state controlled or operated by public utility bodies, to make the necessary improvements, such as the erection of houses and farm buildings, the leveling and ditching of irrigated land and the furnishing of practical superintendence over the farming operations of beginners to prevent costly delays and mistakes. Third, the period of payments by landholders was made extensive enough to enable them to earn from the soil the principal and interest on their loans. The settler moreover was extended credit at low rates of interest to enable him to improve the land. Fourth, there were placed at the service of the farmers experts who were fully informed regarding markets and marketing methods, prices of farm equipment and farming operations in the locality. These experts were to give practical counsel to inexperienced beginners or immigrants from other countries as to what crops to plant, when and how to cultivate or where and how to market.

This type of state aided settlement has with few exceptions been remarkably successful. Inaugurated to persuade men who had industry and thrift and little else to become landowners,

it has made so strong an appeal to the aspirations of these settlers and the conditions of payment have been so well adjusted to the profits of agriculture that in nearly all countries it has been self-supporting and in some cases has earned a profit. At the same time it has revolutionized rural conditions.

The days of the pioneer of course are not yet completely over. Even today hundreds of thousands of families with no encouragement other than the promise of free land and with little resources beyond their personal belongings are annually pushing out the frontiers of settlement. In the words of Isaiah Bowman (*The Pioneer Fringe*, p. 2-3): "The pioneers of today include millions of Chinese, hundreds of thousands a year, on the move . . . to reach the edge of settlement in Manchuria; remote Scotch, Welsh and English sheep herders, and equally isolated farmers, living in the belt of grassland along the eastern foot of the Patagonian Andes; tens of thousands of settlers of many sects and nationalities in the Canadian northwest . . . ; Dukhobors, Hutterians and Mennonites; Australians . . . on the endless grasslands of their sunbaked continent; Boers and Englishmen and Portuguese in southern Africa, on the dry veldt and the cooler tropical highlands as well as in the rich hot valleys . . . where there is a reservoir of cheap black labor; Russian cart trains trailing into the plains of western Siberia and the Steppe Region and shoving the untamed Kirghiz nomads before them or persuading them to accept the servitude of the plow as they turn virgin grasslands into grainfields." But in those regions where an understanding public agricultural policy prevails planning has been substituted for chaotic individual enterprise, the personal risk of the new settlers to a large extent has been eliminated, and the result has been a policy of land settlement calculated to benefit the tiller of the soil and to strengthen the economic and social institutions of the states themselves. Nowhere is this better demonstrated than in Denmark, which was the first nation in modern times to develop a complete program of internal colonization. The case of Denmark vividly illustrates the changes which can be effected in a national economy by helping men to own farms, by expert guidance of farm operations and by the creation of agencies for the marketing of farm surpluses.

In the last quarter of the nineteenth century Denmark, whose territory had been radically contracted by the separation first of Norway and

then of Schleswig-Holstein, appeared to be threatened with national bankruptcy. Farm laborers were discontented and moving into the cities; men with some capital were abandoning their farms and migrating to America and Australia; owners of land in many cases found it impossible to hire cultivators. To check the migration of laborers therefore there was passed in 1899 the Danish Closer Settlement Act, whose chief purpose was the formation of allotments and small holdings in order to give the modest tillers of the soil the independence and sense of security which would come from owning their own homes and to improve their income by giving the family sufficient land to grow the foodstuffs needed for its own table. This first statute was limited in its operations to a period of five years, and the area of land which could be acquired by any individual varied from less than a single acre to 20 acres. The farms for the first experiment came from the cutting up of state lands. Small as was the holding, it was necessary to have a system of credit which would make possible the erection of homes and the stocking of barnyards. The law therefore extended state credits to the landholders up to a maximum of \$1100. Under succeeding laws the maximum loan was raised to approximately \$4500, while the limit of 20 acres in the first act was originally raised to 30 acres and finally in 1909 was removed altogether. The result was the transformation of what had originally been a scheme for the encouragement of agricultural laborers' holdings into a complete program for internal colonization.

In the beginning laborers showed considerable reluctance to take advantage of the small holdings act, fearing that this was merely a device of the proprietors to tie them to the land. But before the end of the first five-year period the earnings from these small tracts of land were so sizable that many who had accepted the farm as a laborer's allotment were able to give their entire time to its cultivation and so become independent cultivators. At the end of the five-year period the law was renewed. This process of renewing the experiment every five years has gone on, until today all the holdings are classified as farms.

Under the succeeding statutes the law has been liberalized to permit not only agricultural laborers to become small holders but also all those who live by agricultural work. Applicants must be of Danish nationality, must be at least twenty-five and not more than fifty years of age

and must have had not less than four years' farming experience after reaching the age of seventeen. The land selected by the prospective applicant must not exceed \$5800 in value, including the estimated value of the dwelling house, the livestock and the movables. The cost of buildings must not exceed \$3050. The state advances nine tenths of the value of the property and the settler cannot obtain loans on more than one piece of property. The prospective settler must have available capital amounting to at least one tenth of the value of the holding which he wishes to acquire; he must reside on the land and cultivate it according to the system ordinarily adopted and he must be supplied with the necessary equipment and livestock. The dwelling house, livestock and equipment are to be insured against fire in a company recognized by the state. A part of the loan for the establishment of buildings, up to a maximum of \$830, is free of interest. The interest rate is fixed at $4\frac{1}{2}$ percent. No part of the capital is repaid in the first five years, but after this initial period annual payments are to be made of 1 percent of the loans for buildings and $4\frac{1}{2}$ percent of that part of the building loan on which interest is paid, until the loan has been repaid. Thereafter the annual payment is $5\frac{1}{2}$ percent of the loan for the acquisition of land until the whole amount is paid off. The land is acquired by purchase on the favorable terms indicated, subject to the following restrictions until such time as the payment of all that is due the state has been completed: first, the holding must not be subdivided without the authorization of the Ministry of Agriculture; second, the holding cannot be transferred to third parties except to sons or sons-in-law of the holder; third, on the death of the holder the widow is permitted to continue to occupy the holding subject to the due fulfilment of the conditions laid down.

In this fashion the number of agricultural holdings established by direct public support from 1899 until the end of the 1920's was about 18,000, or nearly 10 percent of all the holdings in the rural districts and considerably more than 10 percent of the number of holdings which are capable of supporting a family. The total loans and grants made by the state have been in excess of 140,000,000 crowns (1 crown = \$.268). Because of this farsighted legislation Denmark has become a land of home owners instead of tenant farmers. Today more than 90 percent of the people own the land which they farm. Here the small farms predominate, about 100,000 of

the 205,000 farms averaging 50 acres in size and another 100,000 averaging about 20 acres. One of the results of this policy of making tenant cultivators farm owners has been the development of cooperation and the creation of local manufacturing industries. Cooperation cannot flourish where tenancy prevails. It must have as a basis security and permanence of ownership. The cooperatives of Denmark have established a reputation for the excellence of their products and a perfection in marketing methods that enables them to compete in dairy products and bacon in the markets of the world.

In Germany as in Denmark internal colonization and closer settlement under state aid had their origin largely in the exodus of dissatisfied tenants, laborers and cultivators and their migration to the cities and to other countries. There operated in Germany as well the additional motive of nationalism; that is to say, the desire to Germanize the two eastern provinces of West Prussia and Posen, where the large estates were concentrated in the hands of Polish proprietors. In 1886 therefore a home settlement commission was established for the purpose of encouraging internal colonization in the two provinces. The large Polish proprietors were deeply in debt and their land was available for purchase at low rates, thus offering an exceptional opportunity for the settlement of German laborers and peasants. The law placed at the disposal of the commission a fund of \$24,000,000, which was increased from time to time until by the end of the World War more than \$400,000,000 had been spent in this movement. The commission selected the landed estates answering as nearly as possible the principal requirements of future settlers; bought the land; improved the property so as to prepare it for cultivation in small holdings; organized communities, schools and other civic agencies necessary in the foundation of new settlements; placed the settlers on the land; and supervised the development of the colonies. By 1918, when the commission wound up its affairs, it had succeeded in placing on the land in the two eastern provinces a total of 21,749 settlers on 765,530 acres, the average holding being 35.2 acres.

The aid of the best agricultural and economic minds was enlisted to work out for each colony a plan of development that would make the most of soils, crops and conditions. Settlers were required to have some capital, but the greater part of the money needed to improve and equip these farms so that they could be handled to obtain

the best results was provided by the government. The settler was given fifty years' time in which to pay for his farm with a low rate of interest. So long as he met these payments he had a security of tenure equivalent to ownership.

The settlement commission on principle required that the small holders have the capital to pay for the necessary buildings, livestock and implements. In case the settler's capital was insufficient the commission usually granted loans up to one half the amount possessed by the settler, at $3\frac{1}{2}$ percent for twenty and one half years, including interest and amortization. Without making the settlers feel themselves pensioners of the state the commission protected them against calamities and aided them in many ways. For example, it provided them with breeding stock, encouraged the cultivation of fruit trees, assisted in the formation of cooperative societies and fostered agricultural education.

It should not be inferred that this land settlement policy was launched only for the colonization of the Polish speaking provinces. The program was extended to include also the other provinces of Prussia, first by means of the enactment of the so-called *Rentengut* (rent-purchase holding) legislation of 1890-91; then by the creation, beginning with 1903, of public utility settlement societies; and finally by the establishment of the *Rentenbanken* (rent banks which acted as intermediaries between the former owners and the new settlers). The public utility settlement societies, which were organized as limited liability companies, took over the execution of the land settlement programs and in time were to be found functioning in all the Prussian provinces. Because of their credit mobility and their intimate familiarity with local situations they were very successful; in the whole of Prussia, from 1886 to 1919, 2,342,404.7 acres of land were acquired for settlement, of which 1,403,125.5 acres were distributed in the form of leaseholds among 45,530 settlers.

The passage of the Federal Land Settlement Law of 1919 indicated that republican Germany meant to push vigorously the same program. Taking a leaf from the Prussian pre-war experiences the new code called for the centering of settlement projects in the activities of the public utility societies. These bodies were empowered for purposes of settlement to take over at the expiration of their leases all leased state lands and uncultivated moors or other waste lands and to purchase agricultural areas in their districts in excess of 25 hectares (61.75 acres). The large

estates and not the state domains, however, were to serve as the chief source for additional lands. The states were to acquire areas for settlement chiefly by preemption, but the right of expropriation was provided for in those districts in which properties over 100 hectares (247 acres) made up more than 10 percent of the area available for cultivation. For a time the program worked well, but the period of inflation destroyed the capital structure of the public utility societies and hence put an end to the creation of new settlements. In 1926 therefore the federal government was compelled to assume the financing of land settlement projects and voted an annual credit of 50,000,000 marks for five years. This step revived the process of internal colonization in the country. In all in the post-war period and up to 1929 some 50,720 new independent farms had been created, of which 12,330 were new settlements and 38,390 enlargements of small farms (each in excess of 25 hectares).

In Spain beginning with 1907 directed internal colonization became a recognized public policy, chiefly at first on the basis of the utilization of state lands and then later by the breaking up of large estates. The motives and the methods employed were to a marked extent similar to those of Denmark and Germany; between 1908 and 1926 there were founded 18 settlements with 1672 small holders located on 11,028 hectares of land. In 1927 a royal decree reorganized the central body responsible for rural settlement placing authority in the hands of the General Directorate of Agricultural Social Questions. The purposes of the edict were to establish as many small holdings as possible by a division of the land, to grant parcels to cultivators who possessed little or no capital and who were prepared to farm the land themselves and to provide for tenant farmers opportunities to become the owners of the plots they tilled. Settlers were to receive state credits on the basis of long term loans of twenty-five years, an initial payment of only 20 percent of the value of the holding being required. These liberal provisions were quickly taken advantage of so that even before the revolution there were in evidence many signs to indicate that a profound change was taking place in the agricultural organization of the country. Not only were the large estates being broken up and the small landholders growing in size and confidence, but the easy agrarian credits were making possible the relaxation of the centuries old dominance of the landed proprietors and the money lenders.

In post-war Europe generally the same ferment was at work. Austria and Hungary, for example, followed in the footsteps of Germany in exercising the rights of preemption and expropriation of large properties and in making possible the creation of small holdings through the extension of state credits. In Hungary state settlers received the amount necessary for the purchase of breeding stock, interest free and repayable over a four-year period. Loans for the purchase of seed grain were to be advanced for one year without interest, while young fruit trees and grape shoots were distributed free. The purchase price of the land was to be repaid in forty years at 4 percent interest. In Czechoslovakia, Poland, Rumania and Lithuania large scale owners were suppressed out of hand, these countries going so far as to fix maximum areas for individual holdings. In Czechoslovakia a single proprietor might not possess more than 150 hectares of cultivated land; in Poland the maximum for individual estates ranged from 60 to 180 hectares, based on the type of land held. In Estonia and Latvia the land laws made expropriation compulsory in the cases of certain classes of proprietors. In Estonia settlers might lease their holdings or buy the freehold at a reasonable price and have the privilege of obtaining expropriated implements or stock at special prices. Building loans on very easy terms were made available also. In Finland all landless persons were to be entitled to an allotment of 60 acres. In Italy special loans were granted for the construction or repair of houses, farm buildings and farm roads and for the purpose of supplying water for irrigation as well as for other works of permanent land improvement. Such credits were to be repaid in forty-five years, the interest rate being but $2\frac{1}{2}$ percent. In Switzerland government subsidies made possible the establishment of settlements in sparsely populated and reclaimed areas, the state erecting buildings without cost to the settlers. Thus all over continental Europe estates were being broken up and a program of internal colonization inaugurated whose keystone was the creation of small holdings adequate in size to employ the full time of the settler and his family.

In czarist Russia the end of the nineteenth century had seen the appearance of an integrated governmental program of land colonization. In addition to the military, convict and forced settlements in Siberia efforts were made to encourage the creation of peasant holdings and with the establishment of the Peasants' Land

Bank financed by the state loans under extremely favorable conditions became available. It remained for the October revolution, however, with its underlying thesis of nationalization of the land to break up the old serf system completely and make possible the inauguration of a program of land colonization on a general basis. From 1924 on, as V. P. Voshchinin has pointed out (American Geographical Society, *Pioneer Settlement*, p. 266-69), the processes of migration and colonization in Soviet Russia became stabilized with the following concepts serving as the guiding principles. First, the free movement of Russian peoples was to be discouraged and mass colonization substituted on the basis of complete technical planning previous to settlement. Second, no migrations were to take place unless their purposes were "in keeping with the interest of the region to be colonized and unless the natives there are already provided for." The federal government had at its disposal certain land reserves, notably in the administrative divisions of the Siberian area, the Far Eastern Region and Kazakstan and in northern European Russia, to which migrations were to be directed; similarly each autonomous national republic was to have its own land reserve and each province its local land fund for the purpose of settling colonists. Third, colonization was to be considered "as a certain, *scientifically based* system of means to an end. . . . Therefore, the greatest care is taken in the preparation of the organization plans for the development of each region designed for colonization. . . ." Fourth, "the principle of freedom and voluntary decision in migration remains valid as before for every citizen of the U. S. S. R., but . . . only collective migration is assured all possible help from the state." Some of the benefits extended to such settlers were reduced fares, complete exemption from all taxes during the first three years of settlement and the extension of credits ranging from 400 to 600 rubles.

In Great Britain the same procedure of settling small landholders with governmental assistance, beginning first in the case of Ireland, following in Scotland and then extending to England and Wales, was taking place. The beneficial results of this policy were particularly marked in Ireland. Until the close of the eighteenth century Ireland had been a pastoral country. But the elimination in 1806 of all restrictions on the grain trade between England and Ireland, the abolition of the English corn laws and the growth of the population of England brought

about a rise in the prices of agricultural products and converted Ireland into a cultivated country. At the same time the increase in the population of Ireland, which doubled between 1792 and 1841, led to keen competition for land; the result was that agricultural holdings were sublet and subdivided to an ever greater degree. Leases were rare with the result that tenants became more and more subject to the whims and oppression of their landlords. Evictions, confiscation of improvements and excessive rents were more than ever features of the tenancy system. In response to the agitation for reform there was passed the Land Act of 1870, which granted Irish tenants the right to sell their interests in their leases, gave them compensation for disturbance and for improvements when evicted, abolished the ancient principle of the sacredness of free contract and liberalized state financial aid in the purchase of holdings. The inadequacy of the law, which left the Irish people still dependent on leased land for their living and failed to curb the rent raising proclivities of the landlords, led to turbulence during the greater part of the 1870's. The result was the passage of the Land Act of 1881, granting the "three F's"—fair rent, fixity of tenure and free sale. Other reforms followed, chief among which were the land purchase acts of the 1900's, whereby the state pledged its credit to enable tenants to purchase their holdings from the landlords, price being based on fair rents. By 1914 land to the value of over £120,000,000 had passed into the hands of occupying tillers, so that two thirds of all the small holdings of Ireland were possessed by former tenants.

In Scotland the effect achieved was much the same, although the form of tenure differed fundamentally. In 1886 because of the insecurity of the tenants, high rents and the difficulties encountered in the enlarging of holdings the Crofters' Holding Act was passed applying to the seven counties embracing the whole of the western and northern highlands. The principal provisions of this enactment were the following: a crofter or tenant could not be removed from his holding except for breach of certain statutory conditions; he was to be guaranteed a fair rent, which was to be fixed by public authority; on removal from his holding he was to be compensated for improvements for which he and his family had been responsible. In 1897 a board was set up to further the development of agriculture through land settlement schemes and in time its activities were extended to include all

the crofting parishes. This board bought estates, divided them up, sold the holdings to settlers on the basis of purchase price annuities, made loans to encourage the erection of buildings and other improvements and cooperated with large landlords in carrying out land settlement projects. In 1911 the benefits of government aid were extended to small landholders throughout the country, so that fully two thirds of the farmers received either assurance of security of tenure or the offer of state financial assistance toward the purchase of holdings. It is important to note that in Scotland the chief settler remained the tenant; under the system built up by the various landholders' acts he was guaranteed right of occupation, his holding was protected against sale, mortgage or division and he was promised a judicial rent.

In England and Wales land settlement took still another form with the passage of the Small Holdings and Allotments Act of 1908. The Board of Agriculture and Fisheries was authorized to purchase and lease estates, to divide them into allotments (of an acre or less) and small holdings (over an acre) and for the most part to turn these over to agricultural laborers and small farmers on the basis of perpetual leaseholds. These small holdings, which were in effect nationalized, were to be administered by the county councils. How rapidly the small holdings movement advanced in England and Wales before the World War may be seen from the fact that, between 1908 and the end of 1914, 195,499 acres were acquired, of which 178,911 acres were let by the county councils to 12,584 occupiers. The average size of the small holding was 14 acres.

In the British dominions, particularly Australia, the desirability of converting what had once been pastoral lands into farming units led to the inauguration of a program of closer settlements on a grand scale. Before the close of the nineteenth century every effort of the Australian government to check the onward march of the pastoralists had been unavailing. Everywhere sheep herders were squatting on state lands, and their refusal to cooperate rendered quite futile the interesting plan for the settlement of the land by farmers, as set forth by E. G. Wakefield. Moreover their strength in legislative councils compelled the Australian states to recognize their possession of sheep runs by the passage of leasehold and free selection acts (beginning with the Robertson Act of 1861 in New South Wales). Yet in the long run Wakefield's ideas

were to triumph in a modified form, although at great expense to the states which were compelled to repurchase the government lands from the pastoralists, sometimes several times over, before closer settlement could be attained.

The heart of Wakefield's scheme, as explained to the House of Commons by his friend Charles Buller in 1843, was the establishment of colonization as "an extension of civilized society instead of that mere emigration which aimed at little more than shoveling out paupers to where they might die. . . ." To Wakefield land, labor and capital were the essential elements of any systematic program of colonization; and capital, to be obtained from the sale at comparatively high prices of the crownlands, was to act as the fusing force. Wakefield therefore suggested that the government first survey and then sell the public lands; the money thus received would pay for the assisted passage of agricultural laborers from England; these immigrants were to hire out among cultivators, meanwhile saving their earnings; they in turn would purchase land, thus providing the funds for other immigrants, who would be put to work on the farms already established. Thus an endless chain of land purchase, emigration from the home country, permanent labor supply and further land purchase would be maintained. A colonization society was established and during the 1830's and 1840's the plan was experimented with in South Australia, New South Wales and New Zealand. It ended in failure, for capitalists continued to pour their funds into sheep herding, while those laborers who were brought over either hired out as shepherds or chose to seek employment in the towns on the coast.

The free selection program, first inaugurated by New South Wales and then in Queensland and Victoria, resulted in further triumphs for the pastoralists. The original intention was to grant only a temporary recognition of the rights of the sheep herders; in New South Wales, for example, pastoral leases on the crownlands were to be renewable every five years and the right of preemption was severely curtailed; on the other hand, agriculturists might obtain homesteads from the public domain on the basis of free selection, the state compensating the squatters for such improvements as they had created. The result was that the sheep men were able to entrench themselves more deeply, for by exercising the right of free selection they found it possible to purchase the key sites of their runs. Leaseholds were thus converted into freeholds,

so that during the twenty-three years that the Robertson Act was on the statute books of New South Wales the sheep raisers in the state came into possession of great landed properties. Agriculture was no farther advanced relatively than it had been at the beginning of the settlement of the country.

These successive failures compelled a radical change in Australia's land policy. To further closer settlement beginning with 1888 one state after another abandoned the freehold form of tenure and substituted the leasehold, permitting only a conditional right of purchase; Queensland went so far as to deny any right of alienation. Beginning with Queensland in 1894 the states then proceeded to pass repurchase acts in order to hasten the breaking up of the large estates; in 1904 New South Wales was given the statutory power of compulsory resumption, as were later all the states except South and Western Australia. The road was now open for the inauguration of a program of closer settlement.

Victoria showed the way with the passage of various land settlement acts between 1899 and 1914. To prevent aggregation and to insure the permanent possession of areas by their cultivators it was ordered that a settler's title to the land could not be secured until after twelve years of residence; after that time titles were to contain a clause requiring the settler or some member of his family to live on the land eight months of every year. The applicant was required to deposit 3 percent of the capital value of the land when the unit was entered. He then received a conditional purchase lease which was to extend over a period of thirty-one and a half years, the purchase price being repayable in sixty-three half yearly instalments consisting of $4\frac{1}{2}$ percent interest and $1\frac{1}{2}$ percent sinking fund per annum. During the first six years a settler could receive financial aid up to \$2425, and after six years advances might be made up to \$4850. State credits were provided for the erection of improvements and the purchase of stock and implements. The commission in charge of the enforcement of the act even went so far as to build ditches and laterals in irrigated areas, plow the land, grade it, plant alfalfa and construct houses. In many cases livestock was provided. This procedure saved time and money so effectively that in many instances settlers from Europe were living in their own houses and making good incomes from their own dairy herds thirty days after their arrival in Australia. Finally, the state found it necessary to organize

the settlers for cooperative buying and selling and to provide a competent superintendent for each district. This scheme has been conspicuously successful, as have similar ones modeled to a considerable extent after it, which have been adopted by other states of Australia and the Union of South Africa.

An unforeseen post-war development has been Jewish land settlement in Palestine. The English mandate over Palestine, together with the Balfour declaration recognizing the rights of the Jewish people to reestablish its homeland, gave an impetus to Zionist activities, in which agriculture has been considered the essential basis for sound economic development. It is true that during the previous fifty years Jewish immigrants, aided to the extent of \$50,000,000 by Baron Edmond Rothschild, had established small agricultural settlements on the coastal plain, despite the prohibition by Turkish law of the acquisition of land by Jews.

At the present time about 280,000 acres (supporting a farm population of 40,000) are in Jewish hands. About 31 percent of this acreage is held by the Palestine Jewish Colonization Association, a foundation created by Baron Rothschild, and 25 percent by a Zionist organization, the Jewish National Fund; the balance is in private hands. The latter fund, supported by contributions of Jewry throughout the world, has purchased land which can be leased but not sold and is held as the inalienable property of the Jewish people. On this land it is the policy to accept settlers without capital; colonization is conducted by means of funds gathered in the same manner by the Jewish Foundation Fund, which furnishes money also for farm improvements and agricultural equipment. The most unique phase of this colonization is the fact that of the fifty-eight settlements with a total population of about 7200, the majority are in the form either of complete communes or of small holders' cooperative settlements based exclusively on self-labor, the settlers being members of the labor federation. The majority of these settlements are located in the valleys along the maritime plain, the valley of the Jordan and the valley of Jezreel. The latter has become once again, as in Biblical times, the granary of Palestine. The cost of this type of settlement has been high; it has, however, been reduced from about \$5000 per farm unit (exclusive of land) to between \$3000 and \$3500. It is hoped that eventually part of the money will be returned for use in future development, and contracts

guaranteeing such repayment have now been signed by about one half of the settlements. All new settlers under the Rothschild Foundation are required to sign contracts.

The purchase of land was attended by great difficulties: oriental land laws, ownership based on tradition, unrecorded titles. It has given rise to considerable discussion over the rights of Arab tenants and squatters and the Arab agricultural population, a discussion not free from the political implications arising from the conflicting interpretations of the mandate by the mandatory power, Zionists and Arab nationalist leaders.

Astounding progress has been made. Fertile lands which had been abandoned because of malaria or otherwise neglected have been converted into areas of modern scientific agriculture, despite the fact that the majority of the settlers were without previous agricultural experience. The scientific methods now established in orange and viticulture to supplant the primitive indigenous practises have been accepted by Arab growers as well. Swamps have been drained and irrigated, modern farms have been built, and an agriculture as primitive as that of Abraham's time has been supplanted by one of modern science and implements.

In recent years internal colonization has become an essential part of the agrarian programs of Latin American states. The general land law of Argentina calls for the founding of colonies and requires that land be surveyed, classified and planned. In Brazil colonies are established, settlers receiving for a time free food, medical care and seed. In Peru the government furnishes agricultural tools and seeds to colonists in the mountainous region and provides transportation for them from the seacoast to their destination. Mexico since the revolution has traveled farthest of all toward directed settlement of the land on the basis of small holdings. Deriving its authority from article 27 of the 1917 constitution the federal government has evolved a program in which the National Agricultural Credit Bank, the government and private land corporations, the latter threatened with expropriation of their holdings if they refuse to cooperate, all play parts. The plan calls for the establishment of colonies of small holders only after the land has been fully prepared and at least 50 percent of the prospective settlers have been secured. Colonists are entitled to 5 to 50 hectares of irrigated land, 15 to 250 hectares of good non-irrigated land and 50 to 5000 hectares of pasture land.

State credits are provided contingent upon the settler's ability to carry himself over the initial trial years. The final title to the holding is not vested in the occupier until the completion of his payments to the state; he has no rights of mortgage or alienation until that time. As additional aids to agriculture the government is committed to admit into the country duty free such special articles as may be useful in the furthering of the colonization projects and to meet part of the traveling expenses of settlers proceeding to their holdings.

That no quarter of the globe has been left untouched by the movement is demonstrated from the history of the Far East. In Japan, for example, special inducements have been offered settlers in an effort to colonize the northern island of Hokkaido. A tract of land of $12\frac{1}{2}$ to 25 acres is placed at the disposal of the homesteader without charge; if he succeeds in cultivating at least 60 percent of his holding within five years he receives title to the land without any payment. Farm implements may be purchased at reduced rates through the government, while railroad fares for homesteaders are halved. During the 1910's and 1920's the central government of China, the provincial governments of the three eastern provinces and local officials in the latter made repeated efforts to encourage the colonization of Manchuria. As C. Walter Young points out (*Pioneer Settlement*, p. 340): "For twenty years proclamations of provincial and district authorities in Manchuria have been posted . . . purporting to announce lands available for the asking, together with offers of financial assistance, food and implements." While in many cases these generous offers, particularly on the part of colonization companies, have been merely traps to catch the unwary, it is undoubtedly true that Manchuria's colonization has been hastened by directed settlement projects.

In addition to enacting legislation designed to hold their own nationals on the land many governments have recently adopted legislation to attract settlers from other countries. Thus the government of Brazil has offered to the South American Development Company of Japan a tract of about 2,500,000 acres for colonization. The Japanese government in turn grants subsidies to finance emigrants to Brazil. In Peru a large concession of land has been granted by the government to a Polish delegation, which is obliged to bring settlers from Europe. The concessionaire pays all transportation charges and furnishes camps, tools, seeds and the like. The

government gives each settler a freehold of 60 to 250 acres, the balance of the land going to the concessionaire to cover expenses of colonization.

Similarly the agreements entered into between the imperial government of Great Britain and the dominion governments of Canada and Australia provide for aid in placing English colonists on the land in the empire's oversea possessions. This scheme grew out of the Empire Settlement Act of 1922, under which the British government was authorized to join with the dominion governments in any plan of assisted migration, meeting half the cost of the enterprises. As a result Great Britain and Canada in one particular instance came to an understanding whereby three thousand British families were to be settled on the land in Canada. In order to defray their transportation costs, equip their farms and maintain them until they achieved results from farming operations the British government set aside \$4,500,000. This sum was to be advanced as credit to the settlers, the individual loans varying in amount but averaging about \$1500 per family; the loans were to be repayable over a period of twenty-five years with interest not in excess of 5 percent. On its part the Canadian government pledged itself to furnish the settlers farms in established districts, the holdings to be equipped with houses and farm buildings as well as with a sufficient amount of land for immediate cultivation. Between Australia and Great Britain an even more pretentious understanding was reached when in 1925 it was decided to settle 450,000 immigrants in the commonwealth within ten years. In speaking of the Canadian project the Oversea Settlement Committee declared in 1926 that "the scheme has thus far proved a conspicuous success and promises to become the most successful effort in colonization undertaken by any government in modern times." But Stephen Leacock (*Economic Prosperity in the British Empire*, p. 127), after a critical survey of all the settlement programs inaugurated throughout the empire, has come to a less sanguine conclusion, finding that "in spite of all the facilities afforded by the Act, the volume of [British] migration is less than it was before the War, without State subsidies. . . ."

Colonization plans throughout the world ceased for the most part during the World War, reappearing, however, at its conclusion. This revival was stimulated to a considerable extent by the desire to assist ex-service men to obtain farm homes. Many countries adopted laws ex-

tending the provisions of existing land laws to grant special privileges to former soldiers and sailors. All of the English speaking countries with the exception of the United States passed special soldier settlement legislation. This aid to the service men took a variety of forms. Reduced rates or free transportation and allowances were given to the soldier and his family during a probationary period. The soldier was given or sold land at the cost of purchase and subdivision. Advice, guidance and instruction in farm and marketing practises were provided. The land was graded, and farm tools and sometimes farm animals were supplied free or at cost. Credit was advanced for the taking up of mortgages and encumbrances; for clearing, leveling and ditching lands; for erecting fences, buildings, barns and houses; and for construction of homes. Assistance was afforded in the organization and maintenance of cooperative buying and selling associations. In every instance the payments for the purchase of the land or for the reimbursement to the state for advances made for improvements were stretched over a long period of time.

In the United States unusual efforts were made by the administration to obtain the adoption of legislation authorizing the placing on the land of all interested ex-service men irrespective of their qualifications for the work. Fortunately this proposed legislation was not adopted by Congress. Under the present laws ex-service men receive certain advantages in filing claims and occupying their homesteads. So far as the federal reclamation projects are concerned, an ex-service man must possess the same qualifications required of a civilian, that is to say, those of capital, experience, industry and character; but he is given a preferential right of entry of ninety days at the opening of any public land farm units.

A number of the states in the union did attempt, however, to launch land settlement experiments. During the war period and immediately thereafter California, Washington, Oregon, South Dakota, North Carolina, South Carolina and Colorado set up land settlement boards; in the first four states the boards were authorized to acquire land for subdivision or to subdivide state lands. Some of the statutes contained provisions for the improvement of the plots, sale to settlers on easy terms and advancement of credit for the purchase of livestock and equipment.

The California Land Settlement Act of 1917

more nearly approximated Australian examples than any other similar legislation in the United States. Here the statute created a Land Settlement Board and loaned it money at 4 percent interest, the whole to be repaid in fifty years. The board was to plan communities and furnish them with expert guidance, extend credits to and amortize the payments made by the colonists, help the settlers in the creation of cooperative agencies and by its assistance lessen the time in which each farm was to be improved. Two such projects were launched, the first at Durham and the second at Delhi. At Durham the board bought 6300 acres, of which 5000 acres were capable of irrigation. The board then proceeded to build irrigation works and divided the plot into farms varying from holdings of 9 to those of 300 acres. The land was leveled, crops were planted, settlers were helped in the planning and erection of their houses and farm buildings and were granted loans running as high as \$3000. Following all European and Australian precedents prospective settlers were not encouraged unless they possessed a sizable capital of their own. In this case it was found that settlers would require \$4500 of their own money.

Certain definite lessons have been learned from this beginning in California which must be intensively applied before the United States can hope to match the progress in directed land settlement already made in other quarters of the globe. All factors which control health and production must be studied before the land to be colonized is acquired. The price to be paid for land should be fixed on the basis of its earning capacity from cultivation. Only group or colony settlement should be attempted. Cooperative activity in buying and selling is an essential of rural progress. Every settler should have enough capital of his own to protect the state against the losses it might suffer because of the lack of thrift or experience of the settler. The minimum requirement should not be less than 10 percent of the cost of the improved farm. Title to the land should be retained by the state for at least ten years. While the form of tenure granted should be designed to prevent speculation it should at the same time safeguard ownership. A perpetual lease with the right of children to inherit gives as secure a tenure as a freehold title. The land should be prepared beforehand to enable the settler to derive an income from it as soon as possible. Arrangements for lending money and helping in the building of homes should always be features of any planned devel-

opment. The settler's source of credit in the United States is now limited to the local banks, which will lend only for short terms and at high interest rates. The Federal Land Banks cannot help him in these early years, as they will lend only on patented improved land. What is needed then is another source of credit on which the settler may draw to meet his immediate needs of development, repayments to be made over a long period of years at a low rate of interest. In this respect the United States has lagged a quarter of a century behind other nations. Settlers are to be aided with advice as well as credit. The number of settlers must be large enough to create a distinct community life, in order that they may be encouraged to adopt new and improved methods of farming, to raise pure bred stock and to buy and sell cooperatively.

ELWOOD MEAD

See: LAND GRANTS; HOMESTEAD; LAND UTILIZATION; LAND TENURE; SMALL HOLDINGS; IRRIGATION; RECLAMATION; BACK-TO-THE-LAND MOVEMENTS; FRONTIER; AGRARIAN MOVEMENTS; LAND MORTGAGE CREDIT; AGRICULTURE, GOVERNMENT SERVICES FOR; VETERANS.

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LAND SPECULATION is a type of speculation which deserves special consideration not only because of the economic peculiarities of the commodity that is the subject of speculative activity but also because of the extensive and special consequences of that activity. Speculation in land is distinguished from investment in land by a broad zone rather than a sharp line. The investor in land acquires it primarily with a view to employing it as a factor of production; the speculator primarily in the hope of profiting by an expected increment in value. The investor, however, may be compelled to assume risks of changes in value, while the speculator may find it necessary to engage in the developmental functions of a producer either as an incident of ownership or as a means of promoting the increment of value which he is seeking. Frequently the purchase is motivated by both objectives.

Land speculation is distinguished from other types of speculation largely by the special attributes of land regarded as a commodity. Speculation in land is materially affected by the lack of homogeneity of the units of sale. Occasionally, as in land booms and in mineral speculations, location is so paramount a consideration that trading may occur from plats and other descriptive material, but in most cases actual examination is requisite. Since land cannot be assembled at market centers for inspection there is lack of widespread familiarity throughout the market with the facts of supply and demand and with the movement of values. The fluidity of the land market is further limited by the complicated details necessary to effect a transaction. In many cases speculative acquisition involves the assumption of heavy obligations for fixed charges and burdensome managerial responsibilities. If the land is divided into numerous small holdings, a speculator is confronted with an excessive amount of costly negotiation. In the case of urban lots the appropriation of a potential increment in value is inhibited by the presence of buildings which would have to be removed to permit more intensive utilization. These various conditions prevent the land market from having the continuity and liquidity characteristic of the markets for wheat, cotton and standard securities. The lack of homogeneity has prevented the development of short selling and therefore of hedging. Recent attempts at the formation of real estate exchanges have not materially altered the situation. In turn the fact that land is not liquid, except in brief periods of boom activity, and the inability to hedge limit the readiness to buy and sell characteristic of certain other commodities. All land speculation is speculation for the rise, based on a feeling, if not a conviction, that the general trend of land values is continuously upward—except of course in the case of a genuine boom, where each individual expects to sell before the turning point is reached.

Land speculation takes many forms in accordance with the character of risk and the various arrangements for the making of transactions. In the case of good agricultural land recently opened for settlement the prospect for an increase in value may be fairly certain, depending mainly on increase of population and development of transport facilities, local markets and social utilities. In a developed agricultural area increase or decrease in value depends largely on the course of agricultural prices, their relation

to the prices of other commodities, and tendencies in taxation. The movement of the general price level is also a major influence on prices of urban land and of forest and mineral lands. Land values are not, however, nearly so responsive to changes in the business cycle as are the prices of other commodities.

Land prices, particularly of mineral and urban lands, also fluctuate widely in response to merely local influences. A sudden discovery of oil may give rise to a brief period of frenzied speculation. The values of particular urban areas are responsive to innumerable influences, such as the development of public improvements, the shifting of fashion, the sudden development of local industries or the encroachment of an obnoxious industry. Ordinarily, however, where an increment can be reasonably anticipated it tends to be capitalized; this in turn restrains further speculative activity. Normal activity in the buying of land in the expectation of an increment in value may, however, suddenly develop into a land boom. In a boom values temporarily rise out of all normal relationship to actual or potential income. A boom is likely to be preceded by a considerable period of steadily rising prices, which attract widespread attention to the opportunities for a speculative profit. Once started, the increase in momentum, intensified by the ingenious activities of the professional land promoter, is cumulative. The financing of land speculation is carried on in large part by the same institutions which make possible investment in land. Mortgage credit institutions may stimulate ownership and small holdings, or they may become linked with large speculative schemes. Before the development of stock exchanges a method of speculation on margin existed in the widespread practise of buying land on deposit of a fourth or less of the full price with the hope of selling out at a profit before final payment was due. A land boom, especially an urban or mineral boom, may give rise to a rapid turnover of options and "binders," or contracts of sale secured by a small down payment. On the other hand, the great boom in agricultural land in the United States at the close of the World War was based mainly on conservative terms of sale.

Both the small speculator and the large land company appear in the history of land speculation. Both contribute to rising values; the latter involves also in its success or failure the numerous investors in its stocks and the credit institutions with which it is usually closely associated.

Land speculation has constituted in the main a comparatively recent phase of the development of capitalism. So long as property in land was tribal, corporate or public, there was lacking the freedom of transfer essential to speculative activity. Under the manorial system in Europe land tenure was rigidly governed by custom, and even after that system was replaced by more modern forms of tenure and long after the development of a money economy—a *sine qua non* of land speculation—property in agricultural land was subject to numerous customary or legal incidents that restrained the freedom of transfer essential to speculation. Traditional attachments of families, whether of peasants or of landlords, to particular holdings; long leases; the embryonic character of the land market and of facilities for mortgage credit; and the crude and costly methods of effecting transfer of land titles exerted a severely restraining influence on the sale of land, particularly of agricultural land.

Land speculation first acquired economic significance as a concomitant of urban development. The cities of Egypt, Babylonia and Greece and Rome under the republic appear to have developed under rather strict public control, which precluded speculation; but with the pressure of population and the increased development of a money economy in imperial Rome land speculation on an extensive scale made its appearance. Rising land values and tenement housing accompanied speculation in building sites. During the Middle Ages difficulties of land transfer made speculation impossible. The subdivision of holdings necessary to the rapid city building of the twelfth and thirteenth centuries was accomplished by means of land leases. Building sites were leased for a fixed sum, usually for an indefinite period; increasing rents therefore did not bring increasing returns to the landowner, and speculative activity was directed to house building and ownership, where it was carried on extensively. The seventeenth and eighteenth centuries marked the culmination of the building up of great landed estates. Fortunes were gained by enterprising individuals in the course of this evolution; in 1546 a certain citizen of Antwerp secured control of large tracts of land near the city, laid it out in lots and avenues and sold it to the rising city merchants for country houses. But in general the continuing difficulties of purchase and the mercantilistic policies of the period left little room for widespread speculation in land.

The nineteenth century saw the development

of land speculation on a scale so extensive as to constitute a major social problem. Industrialization and the crowding into cities were the driving force behind urban land speculation; the removal of legal restrictions and a *laissez faire* policy were its opportunity. While rapid city building first occurred in England and was accompanied there by a certain amount of speculation in building sites, the type situation and the pattern of future development, for the continent at least, were set by the rebuilding of Paris by Napoleon III under Haussmann. With the publication of the decree laying plans for the cutting through of new streets widespread speculation set in. The remaking of the city meant an immense increase in values. Speculation was carried on by land companies as well as by individuals; it was facilitated by the development of mortgage banks and it drew upon the already established financial institutions for support. During the 1860's and 1870's many of the cities of northern Europe followed the example of Paris. Brussels was the first to adopt the widened streets and the replacement of single dwellings by tenement houses on the Parisian model. The change was accompanied by similar widespread speculation.

It was, however, in Germany that urban land speculation developed in its most acute form. It was most active in Berlin and Munich, especially the former, which was growing with unusual rapidity, but was present in all the larger cities. In Berlin a real speculative fever set in during the 1860's and reached its height in the 1870's. The total value of land in the city doubled between 1865 and 1880. The slight recession of activity after 1875 gave way to increased speculative activities in the 1880's and 1890's, which contributed largely to the crisis of 1900-02. A distinguishing feature of the situation in Germany was the predominance of large scale, organized speculation. While many individual owners took advantage of rising land values within and around the cities to sell at a profit and while much buying and holding of land was done on a small scale, the important speculators were the large land companies (*Terreingesellschaften*). While these land companies could afford to hold land out of use for long periods awaiting rises in values, their profits depended in the end upon its sale; and when no other purchasers appeared, they themselves often set up intermediate purchasers of building sites (*Baustellenhändler*), which immediately resold at a profit to building companies (*Bauunternehmer*). A similar pattern of relationships has

appeared in city development throughout the world during the nineteenth and twentieth centuries (see REAL ESTATE); but in Germany far more than elsewhere the active force in the development was the land speculator. It was usually the land company alone which had adequate capital; of all the land companies operating in Dresden in 1910 the smallest had a capital of 1,000,000 marks, the largest of 6,000,000 marks. The building companies, on the other hand, were generally small and lacking in adequate credit facilities; in many cases they were but straw men for the land companies; they were financed partly by the latter and partly by the large banks (*Grossbanken*), the mortgage banks (*Hypothekenbanken*) and the various insurance institutions. The large *Terraingesellschaften* were also closely related to the *Grossbanken*. Thus land speculation became doubly linked to the whole credit system of the country—through the widespread holding of the shares of the *Terraingesellschaften* and through the advances made for speculative purposes by credit institutions. In the crisis of 1900-02 and again in that of 1911 a serious difficulty was created by the immense losses sustained by these institutions as a result of the failures of such companies.

Since the World War land speculation has greatly decreased in Germany and the other European countries. The fall in prices and the lack of capital have wiped out most of the land companies, while the widespread development of communal and semicommunal landownership and of municipal and public housing programs has largely prevented the reappearance of land speculation.

In the United States rapid city growth was accompanied and in many cases hastened by extensive land speculation. The story of the Astor fortune has acquired almost a mythical currency. Astor began buying land in Manhattan as early as 1805; in 1847 his fortune was estimated at \$20,000,000. Later parceling out of New York City land was accompanied by flagrant corruption, choice water front lots being sold for nominal prices to favored politicians, while fortunes were reaped by speculators with inside knowledge of the course of public improvements. Similar situations occurred in most cities, small and large, throughout the country. In New York City a further widespread real estate boom occurred between 1900 and 1910, resulting in a 116.3 percent increase in assessed value of land within the city. Higher assessment

rates coupled with rising interest and tax rates temporarily checked speculative activity, but from 1922 to 1926 it reappeared. Suburban development gave opportunity for new forms of land speculation and promotion. Throughout the country hundreds of miles of paved streets, electric lights and sewage systems have replaced agricultural land only to remain unused and ghostly monuments of optimism.

Speculation in agricultural and mineral land has accompanied the opening to settlement of new areas in all parts of the world throughout the nineteenth and twentieth centuries. There have been cases of speculation in agricultural land in Europe, such as the widespread speculation in the confiscated lands of émigré nobles after the French Revolution; but such activity has been small in comparison with that in the newer countries. For the most part land speculation occurs where there is the prospect of a rapid shifting of land from one use to another, whether from forest to agricultural use, from agricultural to urban or from low value residential to high value commercial uses; and such opportunities have been most evident, apart from the cities, in the newly developed lands.

In the American colonies land speculation made its appearance early, not unaccompanied by fraud. Land companies as well as individuals obtained vast tracts of land west of the Alleghenies at negligible prices. Throughout the country speculation was one of the most important motivating forces in the advance of the frontier; after 1800 it was carried on to a greater extent than formerly by small purchasers and settlers, who bought far more land than they could hope to till, in the expectation of rising values. The first real craze of speculation occurred after the War of 1812 when the Treasury agreed to take the notes of western banks in payment for land in return for agreement by these banks to accept and reissue Treasury notes. Large speculators increased in number after 1820. There were many records of fraud; at auctions of township land groups of speculators often agreed not to bid above a minimum price and then resold at a high profit. There was a period of great speculative activity in the years after 1830. Land was bought only to be resold, with no intention of settlement. In many cases local banks were heavily involved in the financing of such sales. The panic of 1837 wiped out many speculators and caused a lull in their activity, but just before the crisis of 1857 there was another outbreak of speculative mania. All

along the frontier speculation ran ahead of settlement; in many cases it held land out of the market so long that settlement was forced to pass around or over it. With the adoption of preemption and homestead laws more land was acquired directly by farmers instead of passing through the hands of land jobbers, but there were always opportunities for evasion. The great grants of land to railroads and to educational institutions, the swamp land grants and the distribution of mineral lands opened vast new territories for land speculation. Even with the passing of the frontier about 1890 speculation attending the development of new areas continued. Railroads continued to be cut through new sections and land along the way sold at a profit by those who had had knowledge of the coming of the railroads. Speculation in mine and oil lands increased. In 1909 and 1910 the whole country was swept by a wave of speculation which involved most of the banks in extended loans. There was a great boom in agricultural land throughout the west and south at the close of the World War, the effects of which were intensified by the crisis of 1929.

In most of the British colonies the early period of settlement was accompanied by land speculation very similar to that in the United States. In Canada the basis for future speculation was laid in the colonial period in huge grants to large owners, to the clergy and even to land companies. At a later period railroad building was accompanied by land speculation schemes and forest and mineral lands were parceled out to favored politicians for speculative uses. Recurring attempts at reform and the setting up of land settlement schemes did little to check such abuses. Speculation marked the early stages of settlement in nearly every section of Australia. The introduction in 1831, under the influence of Wakefield, of the sale of public lands at auction at a minimum price, brought to an end the period of land grants which had already resulted in alienation of much of the best land, but it did not put an end to speculation. In most of Australia administrative inefficiency and the successive raising of the minimum price for lands gave the necessary opportunity. Even the successes of the scheme engendered a spirit of speculation. In south Australia, where the Wakefield scheme was to receive special application, the difficulties of securing settlers led the government to sell off portions of its land to a few capitalists at very low rates, with the expectation of increases for later purchasers. Admin-

istrative inefficiency in surveying new territory contributed also to speculation in town sites by the numerous immigrants. In the boom in Melbourne city lands which culminated in the crash of 1892, pastoral and mining lands were also drawn into the speculative vortex, with serious results to agriculture as well as to public finance. In New Zealand provincial control of land disposal frustrated the efforts of the central government to build up small settlements and resulted in a land boom which collapsed in 1873. It was not until the 1890's, however, that effective land reform measures were introduced. Speculation was, nevertheless, still extensive in New Zealand and land changed hands with great rapidity.

In South America settlement of new areas exhibited great variations in the different countries; in general it was complicated by the existence of native races with their own methods of land tenure and by the fact that immigrant settlers were in many cases unable to secure title to lands but were forced to become tenants of the descendants of original large holders. Nevertheless, wherever railroads were built there is evidence of speculation in land grants. The newest area of migration, Manchuria, is apparently experiencing a similar course of events. Public officials purchase land in districts in which they plan to build railroads; these are then actually built several miles to one side of towns along the right of way, thus assuring a market for the intervening land. The lucrative nature of the practise has led to railroad construction more rapid and extensive than is warranted by existing settlement.

The question of the social advantages and disadvantages of land speculation is in part a phase of the more general question of the advantages and disadvantages of private property in land and indeed of capitalism as a whole. Given private property in land, unrestricted markets, private initiative and an unstable price structure, fluctuations in land values and consequently speculation are inevitable. Assuming these basic conditions, a certain degree of social justification for speculation may be alleged even though its excessive manifestations may be deplored. Under a system of private property someone must own the land and take chances on fluctuations in values. Legitimate productive enterprises necessarily incur risks of changes in land prices unless these can be shifted to speculators. Prospects of a speculative profit stimulate economic enterprise, such as pioneer settlement, prospecting for minerals and planning and de-

veloping urban subdivisions. While economists do not agree as to whether high land values cause high rents or vice versa, there is little question as to the effect of speculative promotion activities in building organization and prices or as to the lack of adequate housing facilities for the vast majority of the population which results from speculatively controlled city growth. Over-expansion of the farm area is also stimulated at times by land speculation, particularly in the opening up of new areas for products enjoying a narrow market, such as truck crops and fruits. Ill advised reclamation is promoted in periods of rising prices for farm land, and submarginal lands are occupied which later must be abandoned. Land values out of all proportion to possible farm incomes and taxes based upon such values can only result in a depressed agriculture, in a mounting burden of mortgage indebtedness and an increase in farm tenancy. The chaotic and excessive development of mineral production is also attributable in large part to the speculation inevitable in so risky an industry.

When land speculation takes the form of a boom, the unfavorable consequences already mentioned are intensified and are accompanied by others. Small investors who can ill afford to assume financial risks are drawn into the vortex of speculation. Studies of the agricultural boom at the close of the World War indicate that urban speculators reaped most of the harvest of realized speculative profits, leaving farm buyers handicapped by abnormal capital investments. Municipalities as well as private businesses incur an abnormal indebtedness in expectation of a rapid development, which is suddenly terminated. Business may be long handicapped by the aftermath of heavy taxation, abnormal financial obligations, distrust by credit agencies and the large volume of distress liquidation.

Single taxers and others have laid much emphasis on the distributive injustice involved in appropriation of the unearned increment (*q.v.*). This question is related to the wider problem of the social evaluation of private property in land. There is no conclusive evidence to show that land speculation contributes materially to inequality of wealth distribution. The longer the period during which values increase and the more frequent the turnover, the more widely the increment is diffused. It is an open question whether losses of professional speculators may not in the long run exceed gains. It is widely believed that the aggregate expenditures of min-

eral prospectors exceed their profits; and studies of urban land values suggest that, taking into account carrying charges and costs of promotion, development and sale, the balance may be on the red side of the ledger. Individuals and concerns that have special advantages in obtaining information, ample credit and particularly political influence in the control of municipal improvements enjoy unusual advantages in land speculation. It is doubtful, however, whether their opportunity for making abnormal profits is as great as that enjoyed by those in a position to manipulate prices of securities.

Restriction of abnormal land speculation or alleviation of its worst abuses is worthy of serious consideration. The problem would be largely solved of course by the elimination of private property in land or by the single tax in its extreme form, whatever the other advantages and disadvantages of such measures. Various groups have suggested methods for minimizing the evil effects of land speculation. In the case of mineral and oil lands the formation of mineral pools and the "unitization" of oil well operation would go far toward eliminating speculative abuses. For both agricultural and urban land increment taxes have been proposed and experimented with, notably in England and Germany; taxes on resales within a limited period after purchase have also been suggested. Some of the abuses may be mitigated through pressure by credit agencies to restrain excessive speculation and through the efforts of the real estate profession to impose a higher ethical level of practise. Without abolishing private property governments are in a position to take most of the profit out of speculative activity by various measures: on the one hand, as has been done in a number of European cities since the World War, through the provision of adequate housing at a cost lower than that prevailing under a system of private speculation; on the other, in the case of agricultural land, through proper distribution and use of the public domain and through the establishment or encouragement of cooperative settlements and a system of small farming based on continuous income rather than on the hope of sudden gain.

LEWIS CECIL GRAY

See: SPECULATION; REAL ESTATE; BOOM; PROMOTION; PUBLIC DOMAIN; LAND GRANTS; LAND SETTLEMENT; URBANIZATION; HOUSING; LAND TAXATION; SINGLE TAX; UNEARNED INCREMENT; RENT.

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LAND TAXATION. The land tax is probably the oldest form of taxation. Essentially a tax on the yield of land, in its primitive form it was assessed on the basis of area. In its more developed form it is a tax on the annual revenue derived from land or on the capital value of land. Originally the land tax was strictly a tax in rem, levied according to purely objective characteristics of the tax base without regard to the personal characteristics of the taxpayer. In more recent years, however, the tax tends to assume the characteristics of a personal tax. Taxation of land is also accomplished by means of general tax measures, such as the general property tax, in which landed property is the foundation of the tax base, and the general income tax, which reaches the income derived from land. The advent of income taxation in modern times reduced the fiscal importance of land taxes. Where the land tax continues to exist alongside the general income tax it is generally used as a means of subjecting income derived from property to a heavier tax burden. In countries with a decentralized form of government land taxes are usually reserved for local taxation. Land taxes

proper should be distinguished from the so-called increment taxes, such as the increment duty and reversion duty in England and the various increment taxes in Germany, which were adopted primarily for the purpose of appropriating the unearned increment in land value by the state as well as discouraging speculative land holdings and in which fiscal motives were of secondary consideration (see **UNEARNED INCREMENT**).

The origin of land taxes is lost in antiquity. The earliest land taxes were usually associated with the conquest of foreign territory and were in the form of tributes levied by the conqueror upon the subjugated people for the use of the conquered land. There were land taxes as early as 2000 B.C. in China and a tax cadaster based on a comprehensive survey of agricultural land is known to have existed in early Egypt. In part derived from the Roman land tax and in part an independent development, primitive forms of the land tax existed throughout the Middle Ages; they were, however, of slight importance and of transitional character. A tax on land was introduced in England in 1692 but was converted into a redeemable rent charge in 1798. The development of effective land taxes did not begin until the establishment of modern cadasters, for which the Austrian *Censimento milanese*, prepared in the years 1719 to 1760 and the first of its kind, served as a model. The land tax was the object of a lively discussion in the economic literature of the early modern period. For a time it was not only considered as the principal tax but was advocated as the sole form of taxation. This single tax doctrine (see **SINGLE TAX**) found in English economic literature of the period from the sixteenth to the eighteenth century attained special importance with the physiocrats. The physiocratic doctrine exerted perceptible influence upon the fiscal policy of the French Revolution, and the French land tax of 1790 served as a pattern for subsequent land tax legislation in other countries. The land tax spread to most of the countries of continental Europe, to some countries of the Far East, where it built upon the traditional ancient tax forms, and gained a strong foothold in Australia, where it was considerably modified in the light of the economic and fiscal needs of the country. In the United States the early adoption of the general property tax left no room for land taxes proper, but with the differentiation of property and the growing evasion of personal property under the general property tax the latter has become to a

large extent a special tax on land. The land tax experienced a considerable revival during the post-war period. It is prominent in the tax systems of the new states in central and eastern Europe and has been in a modified form incorporated into the fiscal structure of Soviet Russia.

The establishment of special tax rolls, the so-called cadasters, has been found indispensable to the effective administration of land taxes. The cadaster is a register kept up to date recording all the facts necessary for the assessment of taxes, such as area, type of soil, kind of crop and degree of fertility. The establishment of complete and reliable cadasters covering an entire country is therefore a task of many years, even decades, the expense of which is justified on the ground that such a survey serves other important ends, as, for example, national defense. During the nineteenth century many countries established cadasters.

Where the revenue is used as the basis of assessment the cadaster is designed to facilitate the estimate of the average yield of a plot of land. Such an estimate presupposes an accurate survey of all the land and its classification into groups according to type of crop, degree of productivity and other characteristics. While in one country the rough classification into arable land, pasturage and timberlands may suffice, in others a more refined method of differentiation according to the type of cultivation may be required. The country as a rule is divided into assessment districts. Within each district careful estimates are made of the productivity of typical plots of land, which are then used in estimating the probable yield of comparable plots. In Japan a single assessment district is chosen as a model, and the yield of plots in the other assessment districts is estimated by comparison with the plots in the model district. In order to ascertain the net yield it is often customary to deduct production costs from the gross yield. But since these are usually lump sum deductions of a somewhat arbitrary nature, the result is not the average net yield but at best lies somewhere between the gross and the net yield. In order to take into account the fluctuations of price, crop yields and marketing conditions for agricultural products the cadaster value is taken as the average yield of usually ten to fifteen years. Years of unusually large crops as well as those where exceptionally high prices prevail for agricultural products are usually omitted in this computation. A cadaster prepared in this manner thus indicates only the average yield to be

expected under normal conditions of standard cultivation. In countries where tenant farming predominates the procedure of ascertaining the yield of land is simplified by the use of farm rentals as cadaster values. In this case a fictitious rental of the plots farmed by their owners must be determined. This, however, offers no difficulty because of the wealth of data available for comparison. As the tax on rentals reaches only a portion of the net yield, namely, the net rent accruing to the owner, it has become customary in such countries to levy a special tax upon tenant income and the income of farmers cultivating their own land in addition to the land tax covering rent income. The land tax in the form of a tax on the revenue derived from land possesses the disadvantage of leaving untaxed land which yields no current returns or taxing it incompletely in times of rapid appreciation of real estate when market prices of land increase at a faster rate than that warranted by the earning capacity of land. It was this circumstance among others which accelerated the adoption of the increment taxes in countries which assessed their land taxes on the basis of return.

Where the value of the land is the basis of assessment, the practice has been to use the capitalized value of the average annual yield or to assess the tax upon the so-called current or market value. In the long run the former is undoubtedly the more accurate index of taxable capacity. It suffers, however, from the difficulties inherent in ascertaining the net yield and is further complicated by the problems involved in the selection of the proper interest rate as the capitalization factor. Assessment according to the current or market value is preferably based as nearly as possible upon the sales price of plots of similar quality and in similar locations. This assumes of course that the turnover in the real estate market has been sufficient to furnish adequate comparative material. Since the purchaser in the sale of land used for agriculture usually bases his offer upon a profit calculation previously made, thus arriving at the value of the plot by way of its yield, the current value will at times approach the capitalized income value. But as a rule the differences between the two are rather considerable, particularly in countries where land hungry peasants may force the price of small holdings beyond the level justified by their earning capacity or where the amount of prestige attaching to ownership of landed estates may exercise a similar effect on the values of such estates. In general the use of real estate

values as the assessment basis is an unreliable guide for the just distribution of the tax burden.

The problem of rates offered no particular difficulties in the older land taxes; they were strictly proportional, applied to all real property and were levied without regard to the personal circumstances of the taxpayer. The more recent land taxes, however, have incorporated the principle of differentiation according to the type of crop, location, kind of farming or in the form of a progressively graduated tax. Japan is an example of the differentiation of tax rates according to type of crop. Rice fields and truck farms enjoy a lower tax rate than do lands devoted to other crops. The Polish land tax as applied to the area which was formerly a part of Russia groups the land into several classes, selects one class as the standard unit and calculates the rates for the other classes by multiplying the standard rate by various factors fixed by law. The principle of graduation was introduced into the Italian land tax of 1917 and into the new land tax legislation of the various German states after the World War. A most elaborate rate structure is found in the land taxes in Australia and New Zealand with differentiation according to size of estate, character of tenure and residence of the owner: absentee owners are taxed at a higher rate. Differentiation of the tax burden by means of graduated surtaxes in addition to a basic proportional tax is a feature of the Polish land tax as well as of the land tax legislation of the Austrian succession states. In Soviet Russia the so-called agricultural tax as modified in 1926 is a progressive tax levied on the earnings of the peasant household regardless of source and assessed at standard rates fixed in accordance with the economic conditions prevailing in the various parts of the country. The use of rate graduation and differentiation is frequently inspired by other than fiscal motives. In countries of extensive agriculture, such as Australia, differential rates have been resorted to in order to discourage the formation of large estates, tenant farming and absentee landlordism. In densely populated countries use is made of differential rates and exemptions to foster the development of certain types of cultivation and to promote land improvements, such as clearing of forests, reforestation of denuded areas and reclamation of land for agriculture.

Land taxation in any form raises the cost of production and lowers the net income yielded by land. The immediate burden of the tax rests on the producing farmer. The extent to which

he is able to shift the tax charge to his consumers by raising the prices of his produce depends upon a number of circumstances. In a comparatively self-sufficient economic area protected by a tariff wall against the importation of agricultural products from abroad an increase in the land tax is easily shifted to the consumer in the form of higher prices for agricultural products. Where, however, the domestic producer is exposed to competition with the foreign producer either in the former's own country or in the world market and consequently sells his produce at world prices fixed by factors largely independent of cost conditions in any particular country, the burden imposed by an increase in land taxes rests on the farmer. The low cost producer who hitherto enjoyed a wide margin between cost and selling price finds his net return decreased by the amount of the tax increase. The marginal producer who barely covered his cost of production, including a minimum of profit, will have to produce at no profit or at a loss, change to other crops or withdraw from cultivation. In practise the decision to shift to other types of cultivation or to withdraw from cultivation altogether is accompanied by considerable difficulties and is usually made only after a protracted period of submarginal prices. In general it is fair to conclude that the land tax tends to place the burden upon the agrarian producer and that a shift of the burden to the consumer is the exception rather than the rule.

The land tax is a somewhat inelastic and rigid form of tax. In so far as it is based upon cadastral surveys and assessments a just distribution of the tax burden is impossible, if only because of the rapid rate of obsolescence of such registers and the consequent discrepancies between cadastral and actual values. It is therefore not advisable to institute sudden increases in the tax burden, which only multiply the injustice inherent in tax distribution according to cadaster valuation. Land taxes which have been levied upon plots of land at the same tax rates for long periods of time, as was the rule in former tax legislation, tend to take on the character of a fixed charge upon the land. The purchaser of a plot of land or of an estate usually deducts the capitalized amount of the land tax from the purchase price when determining the net yield value. Thus the new purchaser does not bear the burden of the tax; he has shifted it to the previous owner.

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See: PROPERTY TAXES; ASSESSMENT OF TAXES;

LAND VALUATION; CAPITALIZATION AND AMORTIZATION OF TAXES; GENERAL PROPERTY TAX; SINGLE TAX; UNEARNED INCREMENT; HOUSE AND BUILDING TAXES; TAXATION; LOCAL FINANCE; PUBLIC FINANCE.

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LAND TENURE

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INTRODUCTION. The social significance of land tenure in any society depends upon the economic uses of land in that society and upon its legal and institutional structure. This complex variability precludes easy generalizations from preconceived "laws" of economic or social development. As an example of the danger of such generalization one may point out that the most intense, although passive, use of the soil as "standing room" by modern city agglomerations may be based on individual freehold and municipal ownership, while at the same time in the case of the English cities it is based largely on semifeudal leasehold.

In a rough way a certain parallelism of economic and legal development may be taken to lead from the more collective tenure and extensive cultivation of land to the more individualistic and intensive. In early cultures the radius of movement of the primitive *Wildbeuter*—hunters and nomads—is necessarily large relative to the size of their social units because of the small part played by labor in the exploitation of the flora and fauna; and the nomadic "carelessness as to land" finds expression in the astonishing range of transcontinental and transoceanic migrations which characterizes early history. But these conditions survive the nomadic and hunting period; and the introduction of the agricultural uses of land, whether in gardens or fields,

alters them only slowly. Because of the exhaustion and depletion of the soil there is a tendency for plots and fields, excepting perhaps the great delta and irrigation cultivations, to shift about for a long time amidst an overwhelming area of wild woodland or grassland. It follows from such instability that in these islands of intensified tenure the evolution of the interest of smaller groups or even individuals is apt to be changing and conditional. In the Germanic and Slavic countries of mediaeval Europe rights of "common," not only in pasture but in all other exploitation of land and water, are predominant. But even in the countries in which this is not so marked collective tenure invariably furnishes the setting for more individual tenure, either when common uses of land supplement the individual uses or when collective administrative rights limit these individual uses or even create them by periodic reallocations. Some phase of tenure in commonalty is thus characteristic of most agricultural systems down to the rise of the peculiar individualist property concept connected with modern entrepreneurial capitalism. Increasing attention to this fact by economic and social historians, even where it is but dimly visible, as in Greek and Roman antiquity, would do much to clear up the continual shifting of the political and economic accent in agrarian history between landlordship and large estates

on the one hand and peasant proprietorship on the other.

The vesting of land tenure in an individual as distinct from a social group, whether of contemporaries or of successive generations, is thus a very modern concept incapable of complete fulfilment even in a capitalist economy. But so also is land tenure as an individual right exclusive of other concurrent rights. What must seem a contradiction in terms to the property notion of Roman or of modern civil law—namely, that there may be two or more property rights in the same thing—is evidently the most general rule in the institutions governing the tenure of land. The “monarchical” or “democratic” rights of overlordship and eminent domain in the soil of a tribe or territory express in various forms the fact that until the development of the capitalist concept of landed property immune, except under abnormal conditions, from the state itself society tends to regard all individual tenures of land as normally dependent upon and limited by its own collective tenure. The actual institutions which embody this “superior tenure” are of course manifold. There may perhaps be an all powerful instrument of kingship, as in Africa, India or the Germanic kingdoms. A compromise may be reached with the ruling classes regarding their family property, as in the different systems of mediaeval feudalism. Or the collective interest may apply in different ways and degrees according to whether the land is in individual or collective use and to the extent to which it is settled or in use. Of special interest are the cases where modern civilization reaches into either a real desert or a region of earlier civilization. Whether the newcomers bring their own more or less developed settlement laws or whether a fringe of “no man’s land” is created, there is a clash and possibly a compromise between two systems of land laws, as in the American Indian reservations or the French and Italian penetration of northern Africa.

Second in importance only to the subjection of land tenure to collective or “public” control is the superposition or splitting up of interests in land through “private” transactions. It should not be overlooked in this connection, however, that quite generally the boundary lines between public and private law are fleeting and delusive, above all with respect to land, which has hardly ever or anywhere ceased to invest even its most private uses with at least a touch of public character.

The multiplication of private interests in land

may take two forms. First, there is the vertical division of property or possessory rights leading either to something like the feudal distinction between “direct” and “indirect” dominion or to the more commercial relationship between landlord and tenant farmer. Second but closely connected with the first, the laws of debt and credit have in addition to their organizing function done much to shift and disturb land tenure. Ever since the dissolution of the most primitive collectivism the way has been open for more individualistic debtor-creditor relations between those who have land, which is regarded as the best security, and the lenders in kind or money, who have often been not only economically but mentally superior to the agriculturists. Among the many causes making for this twofold multiplication of interests in land the foremost is the division of social functions on the basis, on the one hand, of a system of upper, or “ruling,” classes which assume the more complicated tasks of the military and administrative protection of society, and, on the other, of a system of urban centers which develop, more or less in contact with these ruling classes, higher economic and intellectual levels of social organization.

The rise of feudalism and rural indebtedness out of the specialization of warlike services which crushed the small and elevated the large landholders is easily overstated and oversimplified. It is true that the great advances in costly armaments, such as the adoption of more elaborate metallic defensive or offensive weapons, have been frequently connected with the ascent to power of warrior-landlord classes—the Homeric charioteers and the Greek, Roman, mediaeval and far eastern knights. But as soon as these technical advances can be financed through taxation by the central government, landlordism ceases to follow them as an inevitable result. Nor is military organization the only or even the most important form of that division of social functions which breeds and is bred by inequalities and dependencies in the tenure of land. From even the more “democratic” primitive society, where the great patriarchal or noble landholders are sought as arbitrators by their common tribesmen, down to the feudal and postfeudal dualism between the jurisdictional rights and duties of the lord and those of the various courts of his men, “class rule” is never to be understood exclusively as the assumption of social privilege through economic and intellectual superiority but also as the devotion of this superiority to a number of social services.

The connection of agricultural land tenures with public functions is characteristic of the prevalence of "natural economy." On the other hand, urbanization and the more commercial and entrepreneurial forms of leasehold and tenant farming mark the transition to a money economy. Freehold and leasehold of houses in the mediaeval town have played a leading part in the expansion of capital, mainly through the institution of the various forms of the rent contract, especially the perpetual contract. Although land tenure in ancient and oriental towns is as yet less explored, it seems significant that one of the chief origins of the hypothec of Roman law should have been the liability of the farmer's chattels for the landlord's rent claims. No doubt the evolution of economic conditions and of legal forms toward money rested largely on an interaction of rural and urban forces, the more substantial cultivators contributing about as much to the growth of urban life as the urban entrepreneurs and money lenders to the dissolution of collective and seigniorial land tenures.

The resulting changes and transitions are infinite in variety. In the areas of early entrepreneurial development there is a rapid mobility of land tenures on the large estates, where the world wide money economy of the Roman church appears to have shown the way toward short leases and commutation of rents in kind into money rents. But there is also a rapid mobility among peasant and burgher tenures, where the absence or early extinction of the collective family tenures prevalent on the large estates facilitated the rise of a farmer class which was able to reorganize both its own lands and those of the great landholders or of the government (as in the continental "domains") on a new capitalistic model. In regions economically more conservative or stagnant, however, such as Latin America and most of southern and eastern Europe, feudal principles of land tenure have resisted the dissolving tendencies of the money economy and have limited its force to the building up of complicated systems of exploitation by middlemen and of equally complicated credit relations; here even urban capitalists instead of assuming the task of intensifying and mobilizing agriculture rest content with drawing rents and interest from the land in much the same way as the older type of seigniorial landlords. On the whole, from antiquity onward there is discernible a rhythm in the comparative scarcity of both entrepreneurial and executive labor. Next to geographical conditions this seems to have brought to the

fore in the development of land tenures alternately the influence of political control and large estates and that of small units and more self-dependent cultivators. The last named, whether they are emphyteutic and military settlers or métayers combining natural economy with money economy and tenancy with wage labor, display the initiative of the small cultivator. Even the most consistently developed large scale farming of the present time, while premising to some extent the labor supply of a landless proletariat, tends nevertheless to replace former limitations on the personal freedom of the cultivators by giving them some hold on the land, even if it be only a plot, a cottage or a share in the raw produce.

Historically land tenures have been bound up with the lowest personal status of human freedom and with the highest of man's social hopes and utopias. In every case the tying of the tenant to the soil by custom or law has resulted either from the placing of slaves on the land or from the limitation of the migration of free tenants by a wide variety of devices at public or private (e.g. credit) law. The less rigorous of these devices must frequently have been acceptable to the landless, because they assured them long term or even inheritable tenures. As a rule they were only the expression of that totality of mutual rights and obligations obtaining between the landlords and tenants of most older agricultural systems. Similarly, land tenure ever since primitive society has been connected with military and political conquest. The superposition of nomadic rulers over conquered agricultural tribes and the slow blending of their racial stocks and their culture have been one of the most general and powerful factors in history. Although the first resulting stratification usually shows the tillers of the soil in various relations of public and private subjection to the conquering herders or hunters, there is reason to believe that the intellectually superior culture of the agriculturists finally prevailed by a process similar to the later supremacy of urban culture, despite its inferior legal and social status, over feudal society.

It is no longer possible for features of primitive collectivism, especially in land tenure, to be interpreted as proofs of that "primitive communism" which appeared as a sort of innate pattern of society to be regained definitely in some future commonwealth. But mistaken as is any such parallelism between primitive arrangements before and modern experiments after the

rise of private property, the preceding discussion of the long continuing "public" elements in all systems of land tenure points to the lack of reality in theories of unlimited property rights in land. The expectation, expressed for the first time by the Russian *narodniki* of the nineteenth century, that there was a possibility of overleaping capitalistic individualism and preserving a continuous development of the more fundamental institutions of a collective economy, especially on the land, has since found expression wherever, as in Asia and Latin America, precapitalistic societies have been confronted by capitalism. And the agrarian reforms of Europe, from Gladstone's reform of the Irish land law to the German "internal colonization" before and after the World War, have had in common a recognition that it is impossible, where land is the basic element of production and the foundation of national existence, to accommodate the rigorous lines of individualistic property and contract institutions to the alienation, leasing and inheritance of land. The two principal social instruments to prevent land from becoming a thoroughly individualized means of production have been large scale cultivation under more or less public operation and cooperation between small cultivators under community supervision. The conditions of production and marketing will probably continue to dictate a varying emphasis on this twofold program.

CARL BRINKMANN

PRIMITIVE SOCIETIES. Property rights are correlated with other social phenomena, so that a complete functional study of land tenure among primitive peoples requires a consideration of their government, clan and family organization, economic activity, technology and religion. For purposes of orientation the economic categories have proved most serviceable in grouping the facts, and they will therefore be followed in this article.

Among the hunters of Australia, as has been shown by Radcliffe-Brown, an autonomous localized lineage owns a definitely circumscribed tract, usually exceeding one hundred square miles, which all members exploit on equal terms. The sentimental bond uniting each of these "hordes" with its hereditary territory assumes religious significance. In other parts of the world, for example among the Plains Indians of North America, this religious attachment is lacking and the group is not limited to kindred.

Such departures from the Australian norm do not alter the character of the communal pattern which involves equality of opportunity within the political unit; abstract communism, however, is not present. The territory is not an "every man's land" except for the members of the unit; aliens are rigidly excluded—the Californian Maidu go so far as to forestall trespass by a system of sentry posts.

All hunting tribes were formerly believed to conform with minor variations to this characteristic pattern, but recent evidence necessitates the rejection of this judgment. The Algonquins of eastern Canada and the adjoining territory in the United States, as Speck's studies have shown, stressed meticulously the private ownership of hunting territories; transgressors were liable to physical violence or evil magic. The Tolowa in California, according to Du Bois, shared the beach without special interests, but fishing grounds on a river bank were owned by individuals, as were the tracts for hunting deer. The Washo of Nevada owned individually clumps of pine nut trees and bequeathed them to their children. Isolated instances of this type of tenure are reported from Queensland, and in Ceylon, as revealed by Seligmann's studies, the individual Vedda not only owned land but were able to transfer tenure. Absolute individualism, however, does not prevail in these instances. The immediate members of the family are usually joint owners in contrast to the whole of the political group. This type of tenure may accordingly be designated as the family pattern.

Technological facts explain the frequent impermanence of land tenure among early agriculturists, where a preemptive possessory right took the place of ownership as defined by jurisprudence. For primitive farming with hoe and dibble involved at best inadequate compensation, so that the soil was soon exhausted and a new clearing became imperative. When a Choctaw erected a house and had planted a plot with maize and beans, his exclusive rights to the land were strictly respected, but if he moved elsewhere he forfeited his claim to his forsaken home; whoever wished could take possession without remunerating him for his labor. Such conditions account for the rarity among primitive agriculturists of the notion that land is conveyable.

Availability of fertile soil may be a significant factor in determining tenure. The Kiwai of New Guinea have an unlimited amount of rich land; every man owns more than he can use, and

economic independence goes hand in hand with social egalitarianism. Sons receive their allotments as they grow up, and during their father's senility they take over the estate with the obligation of supporting him. This joint interest is coupled with the notion of collective ownership by a paternal line of males. As in Melanesia, however, greater freedom of disposal obtains with reference to recently acquired plots. The Kiwai sharply distinguish between ownership and mere usufruct, which may be granted for a limited period. Since ownership is vested in the males of the paternal lineage, a piece of ground may be held collectively by a group of brothers or divided up among them according to agreement, the shares being normally equal. Landtman has shown that in contrast to the definite recognition of property rights as to cultivable land every one is at liberty to fish wherever he pleases.

Matrilineal rules of descent affect profoundly notions of land tenure and inheritance. In Dobu, New Guinea, a man's plots and palms are inherited by his sister's son. The linkage with the hereditary soil is so strong that after the mourning ritual a widower is not permitted to reenter his deceased wife's, i.e. his own children's, village; and although he may give some land to his son, no child may eat of any fruit or crop grown on the paternal tract. Irrespective of conjugal collaboration husband and wife each not only have separate gardens but each must use his own seed "saved yearly from a line of seed handed down . . . by inheritance" within the maternal lineage.

Choctaw, Kiwai and Dobuan society is democratic. Tribes organized on monarchical and aristocratic lines exhibit distinctive conceptions as to land, even where the ruling power is limited. Among the Mashona of Rhodesia the chief, as the vicegerent of supernatural beings, owns the land; hence each household, deriving from him the right to till a plot, may be dispossessed at his will and is precluded from selling the fields. In such autocracies as the Dahomi the king is absolute landlord throughout his realm and merely concedes possessory and usufructuary rights to the tillers. This does not of course mean that such assertions of the royal prerogative are regularly exercised. In parts of Polynesia and Micronesia also serfs or feudal vassals were found cultivating the soil without more than possessory privileges, and the god descended chiefs could tabu to their own use whatever territory they wished to exploit.

For the herder the value of land is derivative and intrinsically negligible. In general there is among pastoral nomads a glaring contrast between their meticulous assertion of property rights in herds and their carelessness as to land. For example, a monarch of the Ruanda in the Belgian Congo was in theory owner of all the livestock in the kingdom and conferred cattle, not territories, as fiefs. In Arabia the Rwala have fixed rules of inheritance as to camels but none as to territory. In southern India the Toda clansmen use the available pasturage collectively, and the same holds for the members of a Hottentot tribe and the Masai coresidents of a district. Different Hottentot tribes, however, formerly waged war for the ownership of grazing land. The same formerly held true of Kirghiz bands in Asiatic Russia who were communists in the summer when land was abundant but individualists in the winter, when a dearth of sheltered quarters was coupled with private ownership of winter territories, which were marked off by natural or artificial boundaries and guarded against trespassers.

ROBERT H. LOWIE

ANCIENT WORLD. Man's transition in the Old World from a hunting and plant collecting economy to one of plant cultivation and livestock breeding led to relatively stabilized communities. In cattle raising civilizations the clans owned their pastures; in hoe or gardening civilizations land tenure by families, joint ownership and in isolated cases private ownership of the land prevailed. Out of the merging of the two primeval types in the neolithic and the early bronze ages there arose agricultural or plow culture, which made use of plowed land, truck gardens, pasturage, forests, water and mineral resources. At this time the foundations of the economic and social order of the world's agricultural civilizations were established among the early Hellenes, the ancient inhabitants of Italy, the early Germans and the ancient Israelites. Except for the development of urban civilization the later bronze and iron ages introduced only technical changes. Pasturage and forest (such as the *ager publicus* in Rome) and water and mineral resources remained the tribal property of all freemen or of privileged upper classes; in an analogous manner gardens, houses and, in the Mediterranean area and the Near East, plantations for producing wine, oil and dates became private property. Tilled land together with the adjacent pasture lands or forests long remained

collective property to be redistributed annually according to a conventional scheme—a result largely of the prevailing system of bare fallow cultivation. Personal achievement and the positions of chief and divine king were rewarded by extra shares; thus upper class families and in the case of conquests tribes acquired special property rights (for example, the *kleroi* of all freemen in Greece, the *ager privatus* in Rome). Wherever private property was too extensive for individual cultivation, the land was tilled by serfs or by free tenants whose civil status tended to approach serfdom.

Between about 4000 and 1000 B.C. urban civilizations of kindred economic and social structure extended from eastern Turkestan and northwest India to the Aegean. Economic innovations consisted of the intensive use of interest bearing loan capital, in the forms of weighed out metal money and allotted foodstuff money, and craft production for the market. A charismatic monarchy regulated the economic life of society through state organization, loan capital and forced labor and, it is estimated, distributed 90 percent of all goods produced. The most important centers were Mesopotamia, where loan capital played an important role, and Egypt, where forced labor was emphasized. From the annual redistribution characteristic of bare fallow cultivation there evolved a centralized annual reallocation of the fertile alluvial land which never lay fallow. A centralized system of irrigation canals maintained by means of forced labor and loan capital made possible an extraordinary increase in the amount of agricultural land. Religious charismata, the rights of conquest and especially the dependence of land rent upon a centralized organization of land tenure soon made the chief of the state the supreme landowner. From geographically limited principalities under the authority of district rulers in Egypt and city kings in Babylonia there arose through a process of warlike accumulation the empires of Egypt and Mesopotamia, both of which served as the pattern for the economic and social organization of the other eastern urban civilizations down to about 1000 B.C.

Peasants, shepherds, hunters and fishermen were required to contribute to the royal treasury varying amounts of produce as well as labor; but they rarely became coloni confined to the land, as in lower Egypt. Out of fiefs, benefices and bequests to landowners and temples as well as through land colonization by entrepreneurs there evolved precarious private domains, as in

the case of the predominantly secular tenure in the Old and Middle kingdoms of Egypt and the extensive temple property in the New Kingdom and in Mesopotamia. The farmers usually remained royal peasants under the direct protection of the state. Military colonists were settled upon inalienable and hereditary royal fiefs in Babylonia, Assyria and Egypt. In neo-Babylonia the obligation of providing recruits became fixed, attached to the plot of land and redeemable in money. The special tenure of the crown property continued to predominate. Except where royal peasants farmed them the domains were run either in the form of allotments to peasants, shepherds and fishermen, who were taxable as tenants, or as large estates operated centrally by means of free wage laborers and slaves. In Mesopotamia seed loans often brought the free farmer into permanent economic dependence upon money lending capitalists. Compared with the large landowner he was always at a disadvantage in the marketing of his products, for the money system of the period made possible only wholesale trade based upon currency. Market trade in small and cheap lots of goods remained on the clumsy and risky basis of barter; the dealers therefore went chiefly to the large agrarian producers.

Toward the end of the second millennium B.C. the Mediterranean basin and the Near East as far as the Indian frontier were settled by peoples whose social and economic organization was that of the agricultural civilization of the iron age. They replaced the overthrown empires by military communities of free farmer tribes with private family tenure of land and without a developed market and interest earning money economy. Only Egypt and Mesopotamia and the lower stratum of the conquered areas, chiefly peasant in character, which were subjugated by the invaders, were able to conserve their structure. Violent internal struggle accompanied the development of cities, of a market economy, of smaller royal domains with serf land tenure and of temple and noble domains in Asia Minor, among the Hebrews, Phoenicians, Aramaeans, Lydians, Medes and Persians; all of these were partly absorbed in the Assyrian Empire organized on the ancient oriental pattern. But this empire was unable completely to extirpate free agricultural land in the Near East; in Judaea, for example, it persisted under religious protection.

Little remained of urban economic influences in Hellas and Italy. The Homeric age represented almost entirely the aristocratic farmer

stage of a conquering people. The leveling process which was typical of early Hellenic development began at that time; it was stronger in the eastern section of Greece and in the overseas colonial areas than in the west of Greece, where the tribal community disappeared more slowly. Royalty and the priesthood were organized socially and economically within the noble class, the members of which settled together in isolated cities, while a part of the free peasantry sank into the subjugated class of bondsmen either because of debts incurred through the continuous state of war and the beginnings of money and market economy or as a result of military conquest. Aside from residual vestiges—such as the kings of Sparta, Cyrene and Macedonia and the temple at Delphi—noble, plutocratic landowning cliques finally attained political hegemony and there developed the distinction between the *hippeis* and *hectemorioi* in Athens, the *hippeis* and *penestae* in Thessaly, the *gamoroi* and *kyllyrioi* in Syracuse, the patricians and clients in Rome and the *oppidani* and *pagani* in Italy. Toward the end of this early period the hoplite phalanx, which was superior to the noble cavalry, came to the fore in the most highly developed Hellenic districts, particularly in the isthmus area. By the introduction of small minted coins, which made it possible for trade in small quantities to be organized upon a money basis, the small peasant's production for the market was given a chance with that of the large landowner. These factors, strengthened and regulated by lawgivers, tyrants and revolutionary movements, tended toward the leveling of the nobility and its land tenure by farmer hoplites, who rose to be the ruling class of the state and who as the *demos* often included landless freemen. During this period the Spartans thus became a socially leveled and stationary ruling class with estates farmed by enslaved Helots and with agrarian cities of the *Perioeci* subject to considerable taxation. The legislation of Solon—particularly the abolition of landed debt and the setting of maximum limits in purchase of land and possibly the creation of a land register—initiated the abolition of serfdom and the transition to an independent farmer class in Attica.

The age of Pisistratus, Croesus, Amasis and Cyrus (sixth century B.C.) was a turning point in the economic life of the world west of India. The Hellenic world came to be completely dominated by a money economy, which with varying intensity spread from Spain to the Indus. The Persian Empire took over an area with a pre-

dominantly ancient oriental social and economic structure, great state and private domains with many dependent peasants, but it allowed its provinces to follow their own line of development. Even before Alexander there began a cultural, social and economic Hellenization of Persia's Mediterranean provinces as well as of southern Russia, which had remained independent. Among the Greeks the farmer hoplites advanced in status during the fifth century as the result of an intensive money and market economy. With the exception of Sparta, where new large estates arose through inheritance and indebtedness within the stationary and diminishing caste of Spartans, and of a few residual remains, as in Thessaly and Macedonia, the farming class absorbed the large estates of the nobility and seized power in the form of oligarchic or democratic *poleis*, usually after driving out the tyrants, such as the Pisistratidae, who had paved the way for this development. Some of the landless freemen, frequently settled as cleruchs in subordinate agricultural areas, were also admitted to participation in state power, while the metics, who constituted a large group among the dealers and artisans, and the slaves remained without political rights.

In the fourth century B.C. the intensive development of money economy in certain regions, such as Attica, led to a new form of large estates farmed by slaves under strictly capitalistic principles of profit and to the decline of the peasantry, who further suffered from the competition of foreign trade. Because of the market opportunities of the time the status of the tenant farmers, who were far from unimportant in Attica and in the temple domains of Delos and Delphi, was much better than in the ancient Orient. The investment of capital in land by purchase or productive loans was not considered speculation, as in the Orient, but was regarded as a safe although relatively low income bearing investment. Rome, which during this period may be taken as typical of the more highly developed areas of non-Hellenic Italy, underwent a transformation of land tenure which slowly followed developments in Greece. The plebeians able to bear arms and the small free peasants fought for and achieved political equality with the gentes of patricians, who up to that time had ruled the city alone, had dominated together with their clients a large part of the *ager privatus* and had occupied a considerable percentage of the *ager publicus*. An economic equalization was achieved by agrarian laws, most of

which aimed at the founding of colonies with small allotments of land on conquered territory. The *leges Liciniae Sextiae* of 367 B.C., which may be regarded as authentic, provided that no private person might occupy more than five hundred jugera (about three hundred acres) of the *ager publicus* nor have more than one hundred head of cattle and five hundred head of small livestock grazing upon it. In 342 B.C. the *lex genucia* reduced the interest rate on existing loans 50 percent and in order to aid the small farmers completely prohibited the future taking of interest. This meant a reduction of landed indebtedness and further made it impossible for the rich upper class henceforth legally to reduce the free peasantry to dependence by means of loan capital.

The advance of ancient civilization as far as northern India and the Atlantic Ocean after the conquest of Alexander was accompanied by an economic assimilation of vast areas tending toward capitalistic accumulation of land. In the Greek world, especially in the Aegean regions, because of predatory wars, emigration, the decline of the birth rate and the linking of money economy and world trade large slave estates and leaseholds accumulated in the hands of urban investors in spite of agrarian revolutions, such as those in Sparta. In Macedonia free agricultural land, which had originally existed side by side with royal land, private land held under the sovereign domain of the king and land owned by the nobility, disappeared except in the mountain districts. State lands, noble estates, leased land belonging to Greek cities and waste land, a result of the wars with Rome, predominated. The Seleucid kingdom in the Near East overthrew the form of land tenure of the ancient Orient. It allocated among the autonomous Greek agrarian cities many royal, private and temple domains with their enslaved peasants; it improved the legal status of the royal peasants on lands under its direct control by giving them village organizations, so that numerous serfs became tenant farmers; and it settled military colonists everywhere.

The dissolution of the Seleucid kingdom resulted in a return to the rule of large landowners and the formation of great private estates. In Judaea, Mesopotamia, Iran and Armenia, formerly parts of the empire, oriental ruling classes rose to power. The sovereign tenure of the king, now employed capitalistically, had never been destroyed in Hellenistic India with its peasant caste bound to the soil or in Nubia. Pergamum

in Asia Minor did not continue to reallocate the state domains taken over from the Seleucids except for a few military colonies but added to their number and extended serfdom. The same course was followed by the Roman provincial administration of Asia Minor, which during the first century B.C. aided colonization and the formation of large private estates with dependent peasants upon government land. During the second and first centuries B.C. the preference in the leased lands of the free cities and temples for hereditary leaseholds over leases for a term of years resulted in a stronger binding of the tenant farmer to the soil. Land tenure conditions in southern Russia and Cyrenaica resembled those in Asia Minor. In Egypt, on the other hand, the pharaoh's sovereign tenure of tilled land and pasturage was never relinquished except in a few cities; only royal land and granted land existed, the latter coming under the heads of temple land, soldiers' farms and land grants. Only house, palm and garden land, olive plantations and vineyards were privately owned. After about 280 B.C. the tilled land was farmed according to a uniform plan under the control of the Hellenized government administration, which employed native peasants with protected and bound legal status. The temples and some of the soldiers received nothing but an income from their land. The land of the rest of the soldiers and the land grants, in most cases previously waste land, as well as privately owned land were exempt from the provisions of the plan; these lands had to be cultivated. Private operation of large estates was possible on land grants if the government did not intervene. The decline of the kingdom of the Ptolemies during the second and first centuries B.C. undermined this system, as complete cultivation according to plan was no longer possible. Seed land often had to be converted into privately owned land in order to keep it under cultivation. Land tenure in Egypt then approximated that of the Hellenistic Near East with its mixture of domains and peasant land.

Sicily both as a kingdom and as a Roman province was more radical than Egypt in that it recognized only the state's tenure of land after the passage of the *lex hieronica*, so that hereditary leaseholders and original owners were on the same legal footing. In addition to taxable peasant land there were state domains, which were readily leased to big entrepreneurs operating capitalistic slave farms. The Carthaginian Empire and Numidia apparently also estab-

lished the state's sovereign tenure of land. As in the East there were urban areas with leasehold land and free peasants as well as villages of indigenous serfs, from which evolved large capitalistic estates with slaves and tenant farmers. After frightful devastation Rome allotted the land of provincial Africa under precarious tenure to friendly princely families, interest paying natives (*stipendiarii*), allied cities, native allies in war and large Roman entrepreneurs, exempting autonomous urban areas as *ager publicus*. Later the Gracchi, Marius and Caesar settled Roman colonists upon alienable land, among slave estates, leased and tributary land. In Gaul the estates of nobles began to displace the free peasantry before the time of Caesar, while in Provence Roman agricultural colonization commenced with the Gracchi.

Following the Punic wars Roman land tenure also began to approximate that of the rest of the world, whose center Rome had become. The old laws protecting the peasantry became obsolete. The Roman nobility, excluded from trade and commerce, began to build up latifundia in suitable regions—on the *ager publicus* and on cheap private land, which often had been devastated by war. These they ran for profit on capitalistic lines and were thus able to make use of their booty money and of the cheap slaves captured in Roman campaigns; they pillaged the entire Mediterranean basin. Despite the continued settlement of war veterans upon the land the number of small farmers in Italy decreased. Even the settlement and agricultural reform policies of the Gracchi retarded this trend for only a short time. The inalienability of the new peasant land, which they enacted into law, and their renewal of the limitation on individual occupancies of the *ager publicus* were soon nullified. The *lex thoria* of 118 B.C. and the *lex julia campana* of 59 B.C. again made the *ager publicus* private property with but a few exceptions.

Whereas Iran and Armenia evolved a feudal land tenure as the Greek cities declined, in the first and second centuries A.D. the Roman Empire began to be filled with Romanized and Hellenized agrarian cities as a result of colonization and constitutional changes. The citizens of these cities were primarily not small farmers but owners of latifundia and of tenant land. In addition there were enormous state domains, such as the *ousiai* in Egypt and the *saltus* in north Africa, which gradually absorbed a large percentage of the private and temple estates through inheritance and confiscation. As slaves became

more expensive and the flourishing provinces scarcely required agricultural imports, the capitalistic slave operated latifundia were transformed into leasehold estates. In the East the vestiges of former village serfdom began to revive; dependent slaves were placed in hereditary settlements, especially upon waste land, as was the case with prisoners of war, the *laeti* and the *inquilini*, who could be sold with the estate. In Egypt and in north Africa the free temporary leasehold of the *coloni*, which originally predominated, suffered the forcible imposition of an increasing number of burdensome compulsory services despite imperial regulations for their protection. Hereditary leaseholds, such as emphyteusis, and similar legal forms grew more common because of the increased shortage of tenant farmers. Under these arrangements the free tenant families usually farmed urban areas, temple estates and then state and private domains. State domains and private estates exercised their own jurisdiction.

During the crisis of the third century A.D. large private estates of a feudal type arose. Waste state land was sold under compulsion to private landowners in return for the payment of taxes. Free peasants giving up their independence fled from the burden of state taxation to the shelter and protection of a baronial *patrocinium*. Veterans forcibly seized state land and urban leased land together with their hereditary tenants. The frontier troops and entire tribes entering the empire were settled as small peasants with the hereditary obligation of rendering military service. Thus there arose a new form of serfdom (the so-called colonate) and a new feudalism; ancient agrarian production based upon a money economy was almost completely destroyed.

During the fourth and fifth centuries institutions which had long been fully developed became standardized and there now began a new economic epoch with features of the Middle Ages. The *coloni* of the state and later those belonging to private individuals were bound to the soil in the several provinces in order not to reduce the principal tax of the empire, which was levied upon the unit of land. The *patrocinium* movement, which had long been vigorously combated through legislation, was legalized and stabilized about 415. By this time the feudal lords together with their *coloni* paid their taxes without the intervention of the provincial tax collecting agencies (*autopragia*); they dominated the cities and finally even took over the collection of taxes

from the remaining free peasants. As a result except in isolated independent villages these peasants also fell under the dominion of the landowners. In addition there were soldiers' estates (of the *stratiotai*), church estates and state domains differing in administrative structure and in purpose. These also were usually extraterritorial in law and farmed by coloni, except when they furnished provisions for the court or contained factories or breeding farms.

The states which arose in the period of migrations as well as the empire of the caliphs based their land tenure systems upon this form of late antiquity. As a result of Heraclius' theme organization in the early seventh century the remnants of the empire which persisted in Asia Minor and in the south of the Balkan region down to 1453 again began to comprise a large percentage of free military farmers. Numerous other communities of free peasants also existed in the eighth century, and even the tenant farmers of the large estates (the *mortiti*) possessed the right of freedom of movement. During the ninth century, however, tenure by the nobility as well as the church again came to the fore. Laws of Romanus Lecapenus and Nicephorus Phocas for the protection of peasants and the confiscations of the tenth century had no effect. In the eleventh century there began the attacks of the Turkish tribes, who established a new military and civil peasantry in place of the late Byzantine feudal system.

FRITZ HEICHELHEIM

WESTERN EUROPE, BRITISH EMPIRE AND UNITED STATES. Economic and cultural historians long believed that the primitive form of agriculture characteristic of the early Teutons was the prevailing primeval form of land cultivation. From it the newer types of agriculture were supposed to have evolved everywhere at a definite stage in economic development. But new and thorough investigations of the economic life of the American Indians, of the civilized peoples of Central and South America and of the races of the South Sea have shown this point of view to be erroneous. They have proved that among these races agriculture took place as an outgrowth of hunting and of the collection of edible wild fruits, while in the case of the Teutons and the Celts it was preceded by a migratory pastoral life, out of which land cultivation gradually developed as meat, milk and collected plants no longer sufficed for sustenance.

The earliest form of Teutonic agricultural

settlement in Germany was still dependent largely upon the raising of livestock, and the primary concern of the German settler was to obtain good pasturage for his cattle. Accordingly the early German farmers did not settle permanently in the newly conquered areas but changed their habitation after the meadows had been thoroughly grazed over and when the small plots of land sown with grain no longer yielded an adequate crop. These migratory clans did not, however, remove to outside settlements and pastures but remained within the confines of the area claimed by their tribes after the conquest. This is the kind of migration reported by Caesar in his description of the Suevi in his *De bello gallico* (IV: 1, 3; VI: 22) and by Strabo of Amasia (Asia Minor) in his *Geographica* (VII: 1, 3).

In the earliest period the gens rarely remained more than one or two years in its new habitation. As cultivation became more extended, annual migration ceased. The clans remained in their settlements and sought to increase their cultivable areas by clearing the common forest and pasture lands. The new land was divided into farming plots and either assigned to the free peasants or distributed among them by lot. The areas considered most suitable for cultivation were chosen for clearing and then divided into plots of about the same size. It was of no concern whether a participant in the distribution received more or less farming land, for there was more than enough available. Moreover the Germans did not understand accurate measurement but simply walked along the sides of their plots of land, estimating the area by the number of steps.

Gradually a certain standard, the *Lagemorgen*, was introduced as the basis of measuring off and distributing farm plots; it represented as much land as a peasant with his team was ordinarily able to plow in one morning, taking into consideration the quality of the soil and its distance from the settlement. In the third and fourth centuries the Germans along the Rhine began to uniformize the plots of plowed land, called *Kampe*, *Gewanne*, *Esche* or *Zelge*, and to divide them into long strips of land lying side by side. There were two reasons for this procedure: the quality of the soil could be better allowed for in the allocation of the strips to the peasant families; and in a plot of this shape the heavy plowshare did not have to be turned about so often. It involved one disadvantage, however, in that the peasant no longer got his share of the joint farming land in one continuous plot but received

several separated strips which often lay in four, five or six clearings (*Gewanne*). It is uncertain whether or not all the peasants who shared a cleared area (*Kamp*) did their plowing together. This was probably the case at first but, as far as is known, by the end of the fifth or sixth century each peasant plowed his own allotment of land. The various individual plots were in a *Gemenge* (mixture), interspersed among the other strips of the same cleared area. Frequently the peasant had no direct access to his plots and had to pass over adjacent ones to reach them; thus it was necessary, if the peasants were not to hamper one another in their work, that there be rigid land regulation providing that all sow the same kinds of grain and sow and harvest at exactly the same time.

Only those free peasants who belonged to the family or village community and who owned homesteads had a right to shares of land. In the earliest times the homestead usually consisted of a fenced in farmyard with a hut, barn and stable and a vegetable or truck garden. Such a peasant farm, called a hide (that which is lifted out of the common property), soon came to include not merely the farmyard proper but the right associated with it to the farm land, forests and pastures of the village community. Within a single family district, if not throughout all the regions of the Rhine, these hides were at first of approximately the same size. Later they often varied, largely as a result of division through inheritance, the increase or reduction in the amount of livestock and the purchase or sale of land. The owners of hides were differentiated into double hide, large hide, full hide, small hide and half hide owners. The theory that the ancient Germans did not recognize private property in land and that all land was jointly owned is incorrect. Even among the German tribes migrating from their northern homes the farmyards were private property, although their owners could not dispose of their farms freely and their interest in the land was a sort of vested possession rather than ownership. The arable, pastures and woodland were the common possession of the village community.

Among the Germans the political kinship organization determined the manner of settlement and land distribution. After a German tribe had conquered a region and taken possession of it, each clan, the members of which often comprised a unit of a thousand families, occupied an area in proportion to its size, and each unit of one hundred families in turn took over a

smaller district within this area. Likewise the members of a gens or of a family usually settled together in one village. Now and then several related gentes settled together in the same village, but in such a case each gens demanded a section for itself. Thus there arose large and small group villages. Separated peasant farms were very rare in ancient Germany and existed primarily in the mountainous regions, which were practically non-agricultural and in which cattle raising was the chief means of subsistence.

The area which was occupied by a family clan was called a mark. Mark is an ancient word which in the form *margo* was commonly found among the early Aryans who penetrated into the Indian Punjab. At first the term was limited to *Geschlechtsmarken* (clan districts) or *Hundert-schaftsmarken* (districts of a hundred families). Later, when several marks were often joined together or newly won territory was added to them, these enlarged areas were also called marks, including even *Tausendschaftsmarken* (districts of a thousand families) and tribal territories. The German gau (canton) was also originally a hundred unit district. The etymological meaning of the term gau is not, however, the same as that of the word mark. The word *gava*, derived from *go* (cow, cattle), is found in the hymns of the Aryans in India, where it means a cattle district; and among the Goths the *gavi* was but a small district. This was also true among the ancient Frisians and Saxons, and the gaus in the districts of the Asterga, Wanga and Nordwidu, mentioned by Ansgar in his *Life of St. Willehad*, were areas comprising only a few German square miles (1 German square mile was equal to about 19 square statute miles). Soon, however, large districts arose in the Rhine country alongside the small gaus. When the Alemanni reached the upper Rhine, they made a distinction between large districts (*pagi majores*) and small districts (*pagi minores*); the latter were also called *huntari* (districts of a hundred families) and *centenae*.

During the first few centuries of the Christian era the Germans concentrated primarily upon increasing their herds of cattle, and agriculture made slow progress. In Caesar's time the tilled fields, deserted when the tribes migrated, returned to a condition of wildness. But after the Germans gave up annual migration they endeavored to cultivate the same field over and over again; since there was no knowledge of systematic fertilization, after bearing grain for two or three years in succession the field was left fallow

for several years. Gradually the fallow fields were used for pasture and in time were plowed again and sown to grain. The peasants changed, in some places as early as the third and fourth centuries A.D., from this so-called savage plow and pasture agriculture to a regulated plow and pasture cultivation in which the changes were made at definite intervals. Subsequently crops were rotated and there gradually evolved the three-field system of farming, which spread over almost all of western Germany in the course of the eighth and ninth centuries.

As long as the number of hide owners was limited, the annual survey and reallocation of land involved little trouble. As the fields increased, reallocation became burdensome; furthermore intensive cultivation was hindered because the peasant had no incentive to plow and fertilize his plots thoroughly, for they might be allocated to another the following year. Accordingly the next step in land tenure consisted in the discontinuance of the annual redistribution, especially since with improved irrigation this became less imperative. Hence there grew up in various regions the custom of making a reallocation only when the number of those entitled to share had changed. The strip system, however, was retained.

The changing economic conditions involved in the course of this development are shown in the law of the Salian Franks, who conquered northern Gaul and then penetrated to the middle Rhineland and beyond, going as far as Thuringia. According to the Salic law, the oldest portions of which were probably compiled between 490 and 496 under the reign of Clovis, the Franks at that time still had their fields divided into tilled plots (*Eschen*), parallel strips of plowed land; but no mention is made of common fields, pasturage or periodic reallocations. The law does contain a number of provisions regulating the behavior of the hide owner in crossing the land of others on the way to his own, and fixing the damages to be paid for injury to crops resulting from such transit.

With further conquests an ever increasing proportion of the land was owned by the kings and tribal chieftains, and large estates spread all over Gaul and throughout the country east of the Rhine. In order to obtain faithful vassals and to win the favor of the Catholic clergy the kings granted a large part of the land conquered by them, the crownlands, as fiefs to their followers and to the church. The Merovingian kings were particularly lavish with land grants. The increase

in the amount of land under the control of the clergy in France may be visualized from the computation made by Paul von Roth in *Geschichte des Beneficialwesens* (Erlangen 1850, p. 253), according to which at the beginning of the eighth century "one third of all landed property in Gaul was owned by the church."

In order to utilize the land the clergy and nobles followed the example of the Roman landowners: dividing their property into small plots, they turned it over to landless young peasants, to freedmen and to the poor, for exploitation and settlement under fixed conditions which varied according to the size of the plots, their location and the nature of the soil. Often the peasants had first to clear the land and build themselves houses; in such cases they usually paid rent only in money and produce. Where the land had already been cleared and perhaps even cultivated or where the landlord aided the tenant in the implementing of his farm, the peasant had to assume in addition to the leasehold rent all sorts of tasks, such as providing corvée teams and messenger service, working on the domanial lands at certain times, cutting wood in the forests and watching and feeding the cattle. Thus there arose in the countries of western Europe a manorial type of economy and a new system of landholding; the theory of feudal tenures was that the ownership of all land rested in the king while all the other holders in the feudal hierarchy were either tenants or subtenants. The fief holders held their lands upon special conditions, frequently involving military service.

The land tenure system of the northern Teutons, who remained in their old habitat at the time of the great migrations, developed somewhat differently from that of the Germanic tribes who settled in the former Roman countries. The northern Teutonic tribes, like the West Germans of the region between the Rhine and the Elbe, were organized into clans, thousands and hundreds. The hundreds' areas of the southern regions, as in Jutland, were usually smaller than the *harden* and *härads* of Norway and northern Sweden, since the Danish areas did much more farming than the northern regions of the Scandinavian peninsula. The type of settlement also varied. In Denmark and southern Sweden the hundreds sometimes settled in large villages, but usually each large family unit settled in its own little village, separated from the other settlements. This type of settlement is also closely connected with soil conditions and stock raising; each large family endeavored to secure

an adequate amount of pasturage as close to its farm as possible. Hence it was customary, when the herds grew very large and the pasture land was no longer sufficient, for a part of the younger generation to move, finding another place of settlement within the hundred's district. As a result in the twelfth century many tribes possessed from twenty to forty small settlements.

The conditions of tenure likewise resembled those of the West Germans. When a family group settled in an unoccupied portion of a district, it withdrew the land surrounding its settlement from the common mark land and cleared a few plots, which were then distributed or allotted among those entitled to shares. As is shown by the ancient laws, especially the West Göta law, each family group which could not make a living in its old dwelling place was free to seek a new place of settlement in another section of its district, to take possession of the surrounding land and to clear it. The unoccupied land of the mark was thus considered common property. Later of course, as the unoccupied areas continued to diminish, it was necessary for the migrants to come to an understanding with the other inhabitants of the mark before occupying new land. The farmyards, together with their truck farming land and cattle enclosures—the latter being included even when they lay outside the farmyard fence—were the private property of the individual families who resided upon them. In Norway and the northern regions of Sweden, since very little grain was planted, the tilled fields were very much smaller than in western Germany.

These tenures, however, applied only in ancient times. The Norwegian *fylke* kings began to crowd one another out of their districts in the eighth century, and finally from 865 to 875 Harald Haarfager subdued all of Norway's petty kings. He followed the custom of conquerors and seized not only the lands which the kings had held as their own property but many *allmends* as well, and from this confiscated domain made grants of land to his followers. Such land was given in *veitsle*, which meant that the grantee received not absolute ownership but the right to the income of the property in return for collecting revenue, furnishing armed forces and performing other services. Most of the land in Norway, however, continued to be held on *odel* tenure; that is, family ownership. Harald levied a tax upon such holdings, but they remained otherwise independent and a real feudal system did not develop.

Joint ownership of tilled land, the so-called common field system, had died out at an early date among the Salian Franks and among other Germanic tribes along the Rhine. Contact with the Romans, or rather with the Romanized Gauls, resulted in the decay of the ancient Germanic system of agricultural organization throughout practically the entire west and south German border regions. The old Teutonic agrarian institutions declined even more rapidly in the kingdoms founded by the Germanic tribes in Italy, southern France and Spain, the states of the Lombards, Burgundians, Ostrogoths and Visigoths. These tribes endeavored at first, but in vain, to conserve the old economic habits and legal customs, which had remained unchanged throughout their long wanderings. Roman estate administration and the colonate had permeated the native population of the countries subjugated by the Romans, and the difference between the Roman forms of tenure and economy and those of the conquering Teutons was too great to enable the latter to be grafted upon the former.

The changes in land distribution and cultivation in the new kingdoms founded by the Teutons in the Roman cultural world are best shown by the evolution of the agrarian systems of Italy and Spain during the early Middle Ages. When in 568 the Lombards after protracted wanderings invaded northern Italy, later called Lombardy, most of their old economic institutions and their common law had already given way to foreign customs as a result of contacts with Romanized tribes. They lacked their former inner unity; the army disintegrated and the leaders of the several detachments established small independent duchies, whose sovereignty was continually threatened by outside tribes. Like the other Teutonic tribes the Lombards had migrated because of a lack of land, and the dukes had accordingly to assign most of the conquered lands to their followers as fiefs. The former state lands they usually took for themselves and their associates, while the property of those Roman landowners who had fled or been slain was distributed among the Lombard nobles and freemen. Moreover, since these estates proved insufficient for this distribution, the Lombards were given tenure rights in the lands of those Roman proprietors who had remained in the country. The land of the latter was divided into three parts, of which two were returned to their owners while the third was assigned to the Lombards. The change in ownership did not re-

sult in any improvement in cultivation. The Lombard owners, taking the place of the Romans or of the Ostrogoths, continued the colonate system—the subdivision of the arable land into leasehold plots rented to half free tenants, the *coloni*. Nor did the tripartition of the land aid agriculture. For lack of implements, buildings, livestock and money the Lombard was often unable to farm his third of the land and accordingly turned over his allotment to the former owner for farming, contenting himself with a share of the crop. There was also little change in land cultivation in Italy during the period of Frankish domination, which followed the Lombard regime (568–774), and during the subsequent struggles between the papacy and the German emperors. Agriculture grew in extent and, as the kings and dukes granted considerable portions of the conquered estates to the nobility and the church, a new class of large landowners arose. The landlords farmed only a relatively small proportion of the newly acquired land. Most of it was subdivided into small plots, as in the Roman colonate, and was allotted to tenant farmers—sometimes to *libellarii*, who were free tenants holding land on hereditary leases in return for fixed rents, but usually to small tenants who farmed the land on shares, frequently half of the produce.

The Visigoths underwent the same experiences in Aquitania. In their newly conquered kingdom, which included most of Gaul between the seacoast, the Rhone and the Loire as well as the greater part of Spain, the arable land was divided into three parts, of which the Visigoths took two thirds, while the forest, pasture and waste land were shared. At the time of the conquest of Spain the Visigoths retained many of their old Teutonic laws; the farmyards as well as the tilled and truck farming land had already become private property, but forest and pasture land continued in many places to be considered the common property of the villages.

As the Visigoths were converted to Roman Catholicism the influence of the clergy increased and large estates and special privileges were granted to abbeys, monasteries and churches in order to insure their support. The dignitaries of the Visigoth kingdom followed the example of their kings, and the Catholic church became the largest landowner in Spain. The clerical and secular landowners generally did not farm their estates; the land was divided into small plots and leased to tenant farmers. For a time the Arabs put an end to the secular power of the clergy.

They introduced new crops, such as rice, fruit trees and sugar, which needed intensive cultivation and which accordingly resulted in the division of land into relatively small holdings.

At the time of the invasion of England by the Germanic tribes the clan institutions and the land system of the British Celts were similar to those of the Irish, although most of the former had already gone over to permanent settlements and to a rather extensive plow culture. More detailed information is available concerning the Irish than the British Celts. During the first two centuries of the Anglo-Saxon invasions the Celts in Ireland were a stock raising people. Like the West German tribes at the time of Caesar they moved about with their herds within the districts belonging to their clan. Only during the sixth century did the Irish begin to settle in fixed villages and turn to agriculture. As a rule, three or four *trebs*—family groups containing from twenty to thirty persons—settled in a village (*baile*). They did not, however, intermingle; each family group resided in a separate section of the village.

In addition to livestock enclosures and some plots of land near the village planted with grain a *baile* included a few plots of garden land (usually called in old Gaelic *subgorts*, or cabbage garden), the amount of which depended upon the number of *trebs*. Such a village settlement together with the truck and grain plots and cattle enclosures belonging to it was called a *faitche*. Every *treb* in the village had a certain share, which was its family property and the crops of which it could use for its own needs. The plowed, meadow and forest land lying at a greater distance was called *sechter-faitche*. This, especially the forests and meadows, was common property; every *treb* could pasture its cattle upon the latter irrespective of the size of its herds and could cut wood in the forest for its needs according to fixed rules. When parts of the previously untilled common outer land were to be prepared for grain cultivation, the work was done in common, and the new cleared areas were often plowed in common before distribution.

In Ireland the clan chieftain possessed considerable power as early as the seventh century. He controlled extensive clan domains whose administration had been turned over to him, and which he often considered his own property. The clan chieftains attained even greater power after the development of a pronounced differentiation between rich and poor within the clans. Even in the fifth century the clan was no longer

merely a kinship group but included slaves, freedmen adopted from other family groups and members of outside clans who were allowed to settle in the clan district as tenant farmers upon the payment of certain levies to the chieftain of the clan. Not all the tenants, however, came from other clans. They were often the younger sons of poor families of the same clan, who rented a few plots of land together with some cattle and the implements necessary for farming in return for rents to be paid in cattle and produce. The leasehold terms were always very stringent. This class stratification laid the basis for further social differentiation. The rich clan and village chieftains became ever more powerful and arrogant, while the dependence of the small tenant farmers increased, so that during the fifth century the relationship between the two classes resembled that of the landowner and serf on the continent.

In England the economic organization of the Celts had not been modified to any extent by the four centuries of Roman rule which had preceded the Anglo-Saxon incursions; and the Anglo-Saxons did not come into contact, as had the Teutonic tribes on the continent, with a culturally superior population. Thus the history of land tenure in England differs from that of the kingdoms founded by the Teutons on Roman territory. The Celts, who fought against the invaders and were unwilling to surrender peacefully, were made prisoners and treated as slaves (theows). Where the natives submitted to Anglo-Saxon rule they were usually allowed to remain on their farmsteads, but they were forced to pay taxes and tribute and often to render services to the Anglo-Saxon chieftains as well.

A true peasant people, the Anglo-Saxons did not settle in urban localities nor did they occupy the Celtic villages. Wherever possible they located their hams and tuns at some distance from the Celtic settlements for the purpose of supervising the latter. As in Germany each clan and gens occupied a separate district. The groups of a thousand families occupied districts called *scīrs*, later shires, while the groups of one hundred settled in smaller districts, called hundreds. Their method of settlement and their system of tenure corresponded entirely with those of the Teutons in western Germany. The term mark (Anglo-Saxon *mearc*) was used for the hundreds' districts. Although this has been disputed by several English historians, who claim that the *mearc* was only a frontier district, not a delimited settlement area, the Anglo-

Saxon laws prove the contrary: in the laws of Hlothere and Eadric as well as in those of Withraed, Athelstane and Edgar the *mearc* is taken to mean an inhabited district. Each hundred was divided into several smaller groups, in which the relationship was closer: *maegths* (kindred), also called *maegsibb* (blood relations). A hundred, presided over by an *aeldor* (elder), usually consisted of from eight to ten *maegths*. The farm together with its garden land in the inner village area, the hide, was the private property of the free Anglo-Saxon residing thereon, called the *ceorl*, *freoman* or *friman*. The *utland*, outer land lying outside the inner village, was held to be the common property of all hide owners in the village, although this joint ownership did not always entail joint cultivation and use. The plots in this outer land set aside for cultivation were plowed and sown in common only during the earliest period of Anglo-Saxon rule. Later the cultivated land was divided into plots and long strips of plowed land and allotted to the hide owners. The forests and meadowland in the outer areas, however, were used in common. Each hide owner could cut a certain amount of wood for his own use from the village forests and could pasture his cattle on the grassland. Throughout most of England common village ownership of the plowed fields lasted only until the ninth and tenth centuries; after that time the shares of plowed land gradually became the private possession of the hide owners.

Pronounced differentiation in property holdings developed especially through the grants of the crownlands given from the eighth century on as fiefs by the Anglo-Saxon kings to the church, army commanders, knights, administrative officials and favorites. The new proprietors divided their lands into small plots, upon which they settled landless young peasants and freedmen, who had to make payments in money and produce and often had to perform services as well. The unsettled conditions of the country as well as the Danegeld and other taxes tended to depress the free peasantry and thus also to influence the growth of manors. After the Norman Conquest huge tracts of land were granted to William's retinue and to the leaders of the troops, so that by the twelfth century most of Britain's soil had been divided into estates, upon which a large part of the total population were dependents. The theory of feudal tenure in England as well as on the continent was that ownership was vested in the king.

The usual manor consisted of a peasant vil-

lage; at times two or three villages were included, while occasionally a single village was divided between two manors. The peasants, usually called villeins, or *villani*, were in bondage to the manorial lord. Their holdings, the *virgates*, usually comprised only one half to three quarters of the arable land of the manor. The remainder was known as the lord's *demesne* and was farmed directly for him. The extent of the plot of land allotted to the peasant and the imposts and services required of him in return varied widely throughout England. The average holding of the villeins was 30 acres. Whereas many peasants were taxed only in money and produce, others had to labor for a certain number of days upon the manorial fields or in the barns and stables and had to pay various forms of tribute (*gafoi*). In return the lord had to furnish his villeins with plots of land and dwellings, cattle and a certain quantity of fodder as well as farming implements. These regulations applied only to the farms of the villeins. The cotters and the *bordars*, or *bordarii*, so-called because they dwelt at the boundaries of the lord's estate, had much smaller plots, usually 5 acres of arable, and as a rule received fewer cattle from the lord of the manor. Since they often had scarcely enough for their own sustenance, they were usually taxed only a slight amount of produce with a relatively greater amount of labor. Tenure in villenage was essentially unfree: the villein was legally only a tenant at will. As a result of custom and because of the lord's need of cultivators, however, dispossession was rare. In addition to these holdings there were free tenures, the holders of which usually paid a money rent and sometimes a small amount of labor. Their rights were protected by the royal courts.

With the increase in money economy the more prosperous villeins frequently had their services commuted in return for a suitable annual or lump money payment. The villein's tenures were converted into copyholds under which the tenants retained their occupational rights as long as they conformed with the conditions of their tenure. There were other copyhold leases in which the tenant had fewer privileges. There were also tenancies at will and the freehold tenures. The trend toward commutation of service tenures into money tenures was accentuated by the famine which England suffered in 1315-16 and by the Black Death of 1348-49, which claimed a toll of from one third to one half the total population of the country. Peasant

farms were deserted. Although the lords tried to repopulate them, the surviving peasants were unwilling to return to serfdom, and their lands had to be disposed of either for a money or produce rental. The rises in the cost of agricultural labor and the growth of a money economy led the manorial lords to rent out the *demesne* lands also. The immediate result of the leasehold system was the growth of a prosperous class of tenant farmers. Holdings became more differentiated in size than they had been on the manor.

In the course of the fifteenth century many tenants were forced from their farms by the sheep enclosures. The development of the English wool export trade and of the textile industry made sheep raising a profitable business; many large landowners turned their cultivated land into pastures, while wealthy urban merchants bought up large tracts of farm land for this purpose. They dispossessed their tenant farmers; and although freeholders and some of the copyholders were protected by law, many were evicted by all sorts of chicanery. According to reports about 50,000 peasant farms were abandoned under the reign of Henry VIII (1509-47). The government intervened to put an end to the depopulation of the rural districts: in 1489 an act prohibited the destruction of peasant farms containing 20 or more acres of land, and Henry VIII decreed that a landowner might not keep more than 2000 sheep. These decrees were, however, ineffectual; the number of peasant evictions continued uninterruptedly and vagrancy became a serious social problem. It declined toward the end of the sixteenth century because the rapid growth of urban industry offered work to a part of the unemployed, while the prices of agricultural products rose considerably. Farming became more profitable and sheep ranges were again converted into farm land. The old landed nobility had lost many of its members and estates in the Wars of the Roses and it became literally a class principle among the well to do to invest a portion of their new wealth in landed property.

The eighteenth century was marked by another enclosure movement and by a serious decline in the number of small farms, although many still persisted. Landownership became concentrated in comparatively few hands and from these estates fairly large holdings were rented out to capitalist farmers. The conditions of tenancy usually included the supply of capital equipment by the landlord. In the nineteenth century the usual lease was for seven, fourteen or twenty-one years. At present it is principally a

yearly agreement. Since the early part of the twentieth century agricultural leaseholds have taken on the attributes of limited ownership through the assurance of fixity of tenure and freedom of cultivation. The last vestiges of feudal tenure were swept away by the Law of Property acts of 1922 and 1925, which provided for only two forms of tenure: freehold and leases for years.

The predominance of leasehold tenure continued without signal change until after the World War, when the high prices of agricultural products led many tenants to buy their lands. Between 1919 and 1924 over 3,000,000 acres were transferred from landlords to occupants. Nevertheless, at the latter date about 76 percent of the land in England and Wales was still occupied by tenants; in 1927 the percentage had dropped to 64 percent. It is doubtful whether capitalistic farming can be maintained with the breakdown of the landlord-tenant system; the possible alternatives at present seem to be either smaller holdings or nationalization, the latter a development that has been widely advocated in England.

In 1924 about one third of the total number of holdings were above 50 acres. Allotments and small holdings had increased at that date because of legislation intended to promote the sale or rental of areas of less than 5 acres so that the laborer might obtain a holding for cultivation as a supplement to his means of subsistence. At the end of 1924 there were 1,170,000 such allotments, covering an area of 168,500 acres; of these many were in urban areas.

In Ireland the Anglo-Norman conquests led to the introduction of the manorial system with the Anglo-Normans as overlords, although the clan system continued to function in part. In the fourteenth and fifteenth centuries England's hold on Ireland relaxed; but with the reconquest under the Tudors the Irish chiefs who had succeeded in becoming manorial lords were replaced by the English, and the clan system completely disintegrated. During the Protectorate, the Restoration and the reign of William of Orange new confiscations and land grants took place. In Ulster the land was largely resettled by the English and Scotch; elsewhere in Ireland the changing of landlords did not alter the position of the tenant, who continued to pay rent for the use of the land.

During the eighteenth and the greater part of the nineteenth century Ireland was a country of large estates and tenant holdings. The landlords

were frequently absentees and on many estates middlemen rented and subleased the land. The enclosure of commons toward the end of the eighteenth century increased the difficulties of the tenantry. A more fundamental factor, however, was the tremendous increase of population and its pressure upon the land, which led to increasing subdivision of peasants' holdings. In 1841 more than half the holdings were units of 5 acres or less but the subsequent famines and emigrations led to some reduction in the number of these very small farms. While some tenants held land on long term leases, the majority of tenancies were annual; and the competition for land resulted in rising rents. In Ulster the tenants were protected by the custom that no tenant could be deprived of his holding so long as he carried out his obligations and that he could sell his interest when he decided to give up possession. Here also rents remained more stable, and rack rents were rare. In the rest of Ireland the economic situation, aggravated by political issues, led to constant agitation. To quell it there were passed from 1870 on a series of regulatory acts which established fixity of tenure, assured fair rents and made provision for government aid to peasants who wished to buy their farms. At first landlords could not be compelled to sell their estates, but in the Land Act of 1923 compulsory features were introduced. Through this series of acts Ireland has been transformed into a country of peasant proprietors. Land, acquired through government assistance, is restricted as to subletting, subdividing and mortgaging. These restrictions have tended to perpetuate small holdings, many of them too small to provide a decent livelihood for the cultivator; in 1928 in Northern Ireland 67,625 out of a total of 127,766 farms were of 15 acres or less; in the Irish Free State the ratio was 172,097 to 402,744.

Land tenure in Scotland has had two lines of development, one in the Lowlands and another in the Highlands. In the former feudal tenure displaced the clan system toward the middle of the twelfth century; some fiefs were granted to the Normans but a greater number went to the Celtic chiefs. Feudalism declined early in the fourteenth century, and by the fifteenth peasant emancipation was probably complete. Tenancies became the rule, with land rented on the runrig system; that is, the division of the land into strips periodically reallocated. There were also leases to a group of tenants, each one cultivating a separate plot. Until the second half of the eighteenth

century, when longer leases became prevalent, the usual lease was for a year. In periods when money was scarce rents were paid in labor and commodities. Toward the end of the eighteenth century the runrig system was abolished and large landlord and tenant farms predominated. In recent years the history of land tenure in the Scotch Lowlands has been similar to that of England. Since 1914 owner occupancy has been replacing the landlord and tenant system, while fixity of tenure and other tenant rights in the land have been assured by the Agricultural Holdings acts.

In the Highlands clan tenure based on military service continued until the end of the eighteenth century, although it was officially abolished in 1748. The chief leased large holdings to his leading followers, who in turn rented land to their retainers as tenants at will. Below these tenants there were sometimes subtenants. Rent was paid in services and goods. The grazing lands were held in common and the arable in runrig. Toward the end of the eighteenth century sheep farmers came into the Highlands and began to lease land. This led to rises in rents and the eviction of the small holders. To remedy the situation there was passed in 1886 the Crofters Holdings Act, which gave to a limited group of tenants security of tenure, fair rents and facilities for enlarging their holdings. This was followed by ineffectual legislation intended to provide farms for the landless and to regulate the commons. All the previous statutes referring to land reform were synthesized and elaborated in the Small-Landholders Act of 1911, which applied to all of Scotland and which established compulsory powers for the breaking up and resettling of large estates. So far, however, little has been accomplished in the latter direction.

But now let us turn back to the history of land tenure on the continent. In Italy it was only after the trading cities had developed into rich city republics that the utilization of the land changed at all. These city republics endeavored to attach as extensive and as fruitful an area of supply as possible to their cities in order to insure their sustenance and to render themselves independent of other territorial states in the matter of food supply. Cultivation was extended and carried on more intensively than before, many crops being planted which formerly had been imported from abroad. These changes were accompanied by a proletarianization of the small tenant farmers, who, since the terms of leases were usually severe and tithes as well as land

taxes rose continuously, were unable to make a living upon their tiny leaseholds and were frequently compelled to hire themselves out as laborers. As time went on the evolution of agriculture followed very different lines in the various parts of Italy, depending upon the climate and nature of the soil, the extent to which efficient industries arose alongside agriculture and the extent to which the commercial cities facilitated the export of agricultural products. This differentiation was furthered by the rise in Italy of a number of petty states and kingdoms whose land and leasehold laws were utterly dissimilar.

At present a variety of forms of tenure exist side by side in Italy. In the Lombard plain, especially in the provinces of Mantua, Cremona, Milan and Pavia, where the soil is moist, farming is carried on predominantly upon a large scale and upon capitalistic principles. On the other hand, vestiges of patriarchal feudal and leasehold systems persist in many places in southern Italy, while the old latifundia system is still in use in many districts of Sicily. In the latter the estates are rented to a general lessee, who usually reserves for his own use only the pasture land, subletting the arable to small tenant farmers, who are actually merely agricultural workers participating in the crop yield. They are wholly dependent upon the lessee, since their rents are almost always in arrears and they generally owe considerable money to their landlord for advances. Share tenancy (*mezzadria*) now predominates in Tuscany and is widespread in most of the other provinces. In Tuscany the terms are usually equal sharing of expenses and produce, while elsewhere the sharing arrangement is generally less favorable to the peasants. In some sections, where the landowner supplies the capital, he has complete authority over the use of the land; in others the cultivator supplies the capital and directs the utilization of his plot.

Agrarian unrest after the World War led to better terms for the cultivators; tenant farmers won the right to a larger proportion of the produce and greater participation in management. There was also a trend toward simple renting agreements and toward collective leasing. Since the advent of the Fascist regime, however, many of the gains won by the peasants have been lost. There are now standardized terms for share tenancies in the various provinces with which all such tenancies within the designated areas are supposed to conform.

In Spain after the reconquest neither the

clergy, the secular feudal lords nor the tenant farmers aided the advancement of agriculture. After the expulsion of the Moors the irrigation plants which they had erected in southern Spain, especially in the kingdoms of Cordova and Granada, were generally allowed to fall into decay, and Spanish agriculture lagged further and further behind that of the rest of western Europe. A wholly inadequate two-field system was followed throughout most of the country. The three-field system gained some ground but was only partially carried out and was linked with a sort of crop rotation. Tilled land was parceled into three crops, but only one parcel was cultivated at any one time; the second lay fallow and the third was used as pasture.

As the land was reconquered from the Arabs, the influence and the landed property of the church increased and its estates, both the old and the new, were granted further privileges. The nobles and the peasant proprietors continued to make gifts of land to the Catholic church, although the Cortes often endeavored to prevent its accumulation of large estates. The concentration of land was also furthered by the laws of mortmain and entail. Latifundia predominated; in the dry sections the owners or lessees cultivated the land with the aid first of serfs, later of hired laborers. In the rainy areas, however, where cultivation was intensive, the land was farmed by tenants. There were also municipal lands which were rented for cultivation to the citizens of the town. The government frequently compelled the sale of these *bienes propios* to help pay the royal debt. Such sales led on the one hand to the growth of large estates; on the other, to the development of very small holdings.

The trend in Spain for the past two centuries has been toward smaller holdings. In the nineteenth century the laws directed against mortmain and entail released for sale a great deal of church, state and private land, much of which was cut up into small plots. From the middle of the eighteenth century to the middle of the nineteenth the government tried to repopulate the countryside by establishing a number of new villages. Each inhabitant was given a patch of ground as an emphyteuta, on moderate terms and free of taxation for six years. A different system was followed in the establishment of eighteen settlements, mainly upon state lands, between 1907 and 1926. The settlers occupied land for which they made payments over a number of years. After the final payment they were

recognized as owners, with restrictions, however, upon their right to alienate or divide their holding; these restrictions were subsequently abolished. During the World War the high price of agricultural produce enabled a number of peasants to buy their holdings, and in 1927 the government worked out programs for converting tenancies into freeholds and for settling cultivators on small farms created by the breaking up of large estates.

According to a survey made in 1925 large holdings predominate in central and southern Spain. In the north and northeast small holdings prevail, often so minute, as in León, Asturias and especially Galicia, that they cannot support the cultivator. In the sections characterized by small holdings owner occupancy is usual but tenant farming also exists. In central, western and southeastern Spain almost 50 percent of the land is held in tenancy, most of the tenant farms being fairly large. Share farming is employed especially in Calmeria and Murcia. In the north the *foro*, an emphyteutic form of lease, is well known; it was introduced in the tenth century and provides for perpetual tenure or tenure for several generations. In 1926 the *foros* were declared redeemable and the government extended credit to those cultivators wishing to acquire ownership. In the Catalonian vineyards the *rabassa morta*, a lease for fifty years or for as long as the vineyard is productive, is common. These emphyteutic leases are disappearing, however, and except in the north short term leases are the rule. Since the revolution of 1931 the collective lease has been inaugurated and a number of reforms in land distribution and land tenure are planned, involving the confiscation of the holdings of church organizations and the nobility.

In France manorial economy lasted longer than in England. The French peasants had to perform less work in the manorial fields than the English but were burdened with more levies and other services. These conditions and the endeavors of the landed nobility to seize the common village lands resulted from the fourteenth to the sixteenth century in frequent peasant revolts. Nevertheless, the common land continued to be monopolized by the nobles. In the meantime the peasants' right to perpetual tenure had come increasingly to resemble complete proprietorship; such peasant tenures were extensive before the revolution. There were also perpetual tenures for which quitrents were paid. After the peasant uprisings of the fourteenth and fifteenth centuries the manorial lords found it profitable to

lease out parts of their demesne land for terms of years. Thus various leasehold systems developed, but they never attained the importance in agriculture achieved by the English. Since the tenants were rarely able to pay their rents in currency, *métayage*, or share farming, was introduced and spread over western and central France with such rapidity that in the eighteenth century almost 75 percent of the farm land in Sologne, Touraine, Berry, Anjou, Maine and Poitou was in the hands of *métayers*. The economic condition of the peasant population was not much improved by this leasing system, for the plots were usually too small for profitable farming, while the terms were severe. If the landlord supplied the seed, the necessary cattle and the farming implements in addition to the tract of land, he was entitled to half the crop of grain and sometimes to half the grape and fruit crop as well; if he furnished only the leased tract and half or all the seed, he was entitled to one third of the crop.

The complete abolition of feudal tenures came about only through the French Revolution. But while the peasantry who held land on feudal tenures acquired full ownership, the redistribution of lands through the sale of the confiscated property of the church and the *émigrés* did little for the landless peasantry. Some of the larger farmers of ecclesiastical lands bought up the acreage they had previously rented; a little went to the wealthier peasantry; but the largest part fell into the hands of the bourgeoisie, who rented it out at first on the *métayer* system but later increasingly on a rental basis. In the north the *métayer* system practically disappeared toward the end of the nineteenth century. The return of the common lands to the peasantry was effected by the Convention's law of 1793. The decrees of 1796 and 1797 again deprived the village communities of their rights to various common tracts which had been restored to them, and the law of 1813 declared considerable portions of the village commons to be national property. There has been no systematic enclosure movement in France. Before the revolution consolidation was rare in any of the areas in which the open field system predominated except in Picardy, where large farmsteads existed outside the villages. In the nineteenth and twentieth centuries a slow, continuous consolidation has been effected through sale and exchange.

Holdings in France are generally small, partly because of the subdivision resulting from the laws of inheritance. The decline in the rural

population and in births, however, has prevented any notable increase in subdivision in the last seventy-five years. Large estates are comparatively rare and where they exist are usually rented in small allotments. In 1908 the minister of agriculture estimated that there were 2,088,000 holdings of less than $2\frac{1}{2}$ acres, 2,524,000 of between $2\frac{1}{2}$ and 25 acres, 746,000 of between 25 and 100 acres, 118,000 of between 100 and 250 acres and 29,000 of over 250 acres. Although these figures are not completely reliable they nevertheless indicate the general distribution of rural land.

In Belgium most of the feudal attributes of land tenure had disappeared by the end of the eighteenth century, while freehold and leasehold had developed. Early tenancy took the form of *métayage* and for some time the *cheptel* was also used. Under the latter tenure the landlord leased cattle with the land; the tenant paid a rent for their use and at the end of the term was obliged to return the equivalent of what he had received. There were also emphyteutic leases for church lands, but gradually the ordinary landlord and tenant agreement prevailed. The sale of church and seigniorial property after the French Revolution led to an increase in the number of large proprietors and tenants rather than of peasant proprietors.

Tenancy is still very widespread in Belgium. The competition for land has made rents high, and the tenant has very little freedom in the management of the property. Until recently verbal leases were usually for one or three years while written leases generally provided for a three, six or nine-year term, the latter being most popular. Share farming is rare. In 1929 a law regulating leases was passed which fixed a nine-year period for first farm leases and gave the tenants liberty in regard to crops and methods of cultivation and compensation for certain improvements. Holdings are generally extremely small and scattered. According to a survey made in 1907, 40 percent of the cultivated area was held in plots of less than $6\frac{1}{4}$ acres, while about 95 percent was held in farms of less than 25 acres. During the nineteenth century, particularly in its latter half, a great deal of common land was alienated. The remainder is usually divided periodically among those with common rights.

In Holland the decline of the feudal system was followed by the purchase of large estates by capitalists, especially in the marsh and pasture lands. The owners generally rented land to the cultivators on leases for years. In the province of

Groningen there developed a special type of lease, *beklem-regt*, which provided perpetual tenure for a fixed quitrent; subsequently these quitrents were redeemed and the leaseholds converted into freeholds. Tenancy is at present widespread, especially in Friesland, but there is evidence of some increase in owner occupancy between 1910 and 1921. In 1921, 48 percent of the agricultural holdings were farmed by tenants; the tenant farms above 1 hectare covered 942,063 hectares as compared with 1,016,122 farmed by proprietors. Land is leased by public auction at high rents and for short terms. Small farms predominate in Holland; more than half are from 1 to 5 hectares in size, while those above 100 hectares constitute less than 1 percent. There are in addition a large number of very small holdings cultivated by persons who are also otherwise employed. In 1918 the government provided financial aid for the establishment of agricultural workers' holdings.

In Germany serfdom persisted even longer than in France, in many cases into the nineteenth century. The conditions of serfdom varied from period to period. On the whole, the burdens of the *corvée* were not intolerable in the west of Germany until the twelfth or the thirteenth century, when the landlords tried to wring a greater income out of their estates. The German Peasants' War and the complaints and demands made by the peasants to justify their uprising show this change clearly. Aside from minor requests peculiar to certain localities they demanded that their manorial lords be restrained from imposing ever increasing burdens and from exercising jurisdiction over them. They asked also that all old levies, deliveries of cattle and the *Besthauptrecht*, the right of the landlord to appropriate without compensation the best head of cattle from the stock of a deceased peasant, be abolished and that all forests, pastures and bodies of water be again released for common use. These endeavors of the peasants were unsuccessful. Defeated everywhere after long struggles, they again came under the dominion of their former clerical and secular lords and many who had formerly been merely attached to the manor or to the land were reduced to *Leibeigenschaft* (bodily servitude). The Thirty Years' War made the condition of the peasants even worse. At its close in 1648 many provinces in western and southern Germany had only from one quarter to one fifth of their former population. Huge tracts of land were completely devastated and had once more to be made arable. In spite of the

prevalent distress the landed nobility endeavored to restore the former conditions of peasant servitude. They were only partly successful in western Germany, and even where restoration took place it was usually considerably modified by subsequent edicts, orders in council and measures for the protection of the peasantry issued by the ruling princes.

The position of the peasants in western Germany just before the emancipation from serfdom was tolerable. In the southwest there predominated the almost free peasant *censier*, whose interest in the land was close to proprietorship and who paid only a nominal quitrent and slight service in return for a hereditary tenure. There were also peasants whose obligations were fairly onerous and who had no legal hereditary rights; customarily, however, the son followed the father in the possession of the land. The vast majority of peasants' tenures were somewhere between these two extreme types.

In eastern Germany the conditions of tenure were much more unfavorable to the peasant. There the manorial lords were the conquerors of the native Slavic peasantry, whose rights were accordingly more easily abrogated. The lords, increasing their domain at the expense of the peasants, who particularly from the sixteenth century were evicted from a large part of their holdings, became capitalist farmers, raising produce for the market and engaging agricultural laborers to work on their vast estates. The peasantry were not completely landless, but their holdings were very small and their rights of tenure and the limitations on their obligations much more insecure than in the west. French revolutionary ideas of freedom and of the rights of man penetrated into eastern Germany at a time when the Prussian government was realizing that under the prevailing rural conditions Prussian agriculture would never reach the height of development attained in England. Its feeling that it could no longer afford to lag behind the states of western Germany, which had abolished serfdom, was reenforced by the fact that the unfortunate condition of the Prussian peasantry was a detriment to the military strength of the state; accordingly in 1810 serfdom was abolished. The *corvée* duties and institutions related to land tenure were retained although in a modified form.

The reformation had been begun by the decrees of 1808 and 1810. They worked to the disadvantage of the peasants, however, because instead of releasing the land which the nobility had

long before seized in contravention of law they reduced the land owned by the peasants. The landlords, provided they indemnified the peasants, were permitted to seize all the so-called new peasant farms created by eighteenth century legislation for the protection of the peasantry. Moreover the nobility were granted the right to convert peasant land into manorial *Vorwerksland* (a part of an estate separated from the main holdings and possessing its own farm buildings and its own farm management) if a peasant farm of equal size was established elsewhere. A law of 1811 provided that peasants who had hereditary tenures were to be allowed to obtain complete ownership of their land by turning over one third of it to the lord of the estate; those with leaseholds were to cede one half. Where the holdings were too small for such an arrangement, a rent was to be paid. The reactionary nobility opposed the law, and the king ordered that it be reexamined. As a result only the peasants with fairly substantial holdings received the right of settling their tenures; and since a request had to be made for each settlement, it was not completed for many years. Those who did not come within the provision of the reform law received the right of freeing themselves from the services levied upon their plots of land by paying twenty to fifty times the annual value of these services to their landlords; such redemption of their conditions of servitude was granted to 289,765 peasants, who had to pay over 18,500,000 thaler (55,500,000 marks) for their "emancipation" in addition to paying large rentals in produce.

In the east the result of the settlement was the further concentration of the common lands and those of the peasants in the hands of the large holders. In west Prussia, where the manorial lords were not farmers, most of the land eventually went to the peasants. The commons were usually retained for general use, although in some places they were broken up. Recently common lands have become the property of the village or town and are used for its support. Enclosure of scattered holdings, except in a few districts, did not take place until after 1850, and the transformation was gradual.

In 1907 large landholders, mainly in the east, still owned and cultivated about one quarter of the agricultural land of Germany. An attempt was made in 1891 to foster small holdings in the eastern states; the government acquired land from which it rented out small areas on permanent tenure. By 1918, 1,500,000 acres had been

used for this purpose. This policy has been furthered by subsequent legislation, notably by the acts of 1919 and 1920. Today the majority of holdings are of less than 5 acres, but a very large number range from 5 to 250 acres.

In the Scandinavian countries the history of land tenure has differed somewhat from that of other parts of Europe. During the Viking period in Norway the landholders had grown rich and purchased additional lands, upon which leaseholds became common. The latter had developed also as a form of tenure on the royal domains and the cleared lands. In the middle of the seventeenth century there were more than twice as many leaseholds as freeholds and only a quarter of the land was held in *odel* tenure. In the latter part of the century, because of the growth of a class of foreign landholders, there was promulgated a decree which taxed large holdings to an extent that made them unprofitable. Tenants bought their leaseholds and small farms increased. This trend has continued and in recent years has been furthered considerably by state support; in 1931, 94 percent of the farmers were freeholders. At present holdings are small, more than 90 percent consisting of less than 10 acres of arable land. Medium sized farms usually have attached to them a number of very small holdings rented on long leases to cotters who ordinarily pay a small sum and also work on the main farm. The government has been helping the cotters to convert these leaseholds into freeholds. Village commons are still found in Norway, particularly in the west; but land farmed under the strip system has been enclosed.

In Sweden the old village strip farming system persisted until the middle of the seventeenth century. During the following century, however, the government succeeded in its efforts to enclose the strips into consolidated holdings. In 1789 ordinary landowners were given the same rights in their holdings as those enjoyed by the nobility in theirs. The period from about 1840 to 1900 was marked by an increase in the number of large farms and the decline in cotters' holdings, which were either taken into the main estate for cultivation or were changed into ordinary leaseholds, for which money rents were given instead of labor. In the last few decades the trend has turned instead toward small farms. These have been promoted by the removal of those legal barriers which hampered the breaking up of estates, by the sale and lease of small farms from the crown domains and by financial assistance by the government. At present small

farms predominate among the 430,000 holdings of more than $\frac{1}{4}$ hectare. About 33 percent of the agricultural holdings are farms of 10 hectares or less, while those ranging from 10 to 50 hectares comprise almost 50 percent. The large holdings are usually found on the open plains. Tenant farms are not common; in 1911 they comprised only 14 percent of the total number.

In Denmark the position of the cultivator declined steadily from the Middle Ages until the end of the eighteenth century, when the peasants were relieved of labor charges and liberated from bondage. The common field system was abolished and holdings were consolidated and cultivated on leasehold or freehold tenures. From the latter part of the nineteenth century the government has extended aid to leaseholders who wish to transform their tenures into freeholds. Danish policy has in general favored farm ownership, and the percentage of freehold farms has increased from about 66 percent in 1835 to 92 percent in 1919. Until very recently small holdings were encouraged. Now, however, the trend is to increase the size of smaller holdings so that the farmer will not have to supplement his income by outside work. According to estimates made in 1919 over half the total area consisted of peasant holdings of between 15 and 120 hectares. There were 134,639 holdings of 15 hectares or less, 69,955 of between 15 and 120 hectares and 1335 of above 120. Since the World War Denmark has passed especially stringent measures for the breaking up of large estates and for their colonization. State leaseholds have also been instituted and the Danish government plans to decide in 1934 whether it will foster in the future farm ownership or the leasehold.

In Finland land settlement took the form both of the village system and of the isolated farmstead. After the union with Sweden the homesteads of those who volunteered for military service and of their retainers were made tax exempt. These volunteers comprised the nobility, and a system of partial vassalage grew up. Although in the later Middle Ages this system tended to develop also into one of feudalism, the peasants managed to maintain the most important of their ancient rights. The homesteads of the independent peasants were taxed, as were the peasant leaseholds on the crownlands. Gradually both types of tenure came to be regarded as conferring occupancy rights rather than complete ownership and the peasants were not allowed to divide or sublet part of their land. In the eighteenth century, however, peasant owner-

ship was recognized and the leaseholds on crownlands made more secure.

Toward the end of the seventeenth century the growth of large estates was checked by legislation. The effect of these and the later laws regarding tenure was greatly to increase the number of small agricultural tenant farmers as well as of peasant proprietors. Between 1805 and 1901 the number of cotters—that is, tenants who occupied small holdings and paid their rent in labor—increased from 25,000 to 68,532. The number of laborers who owned the very smallest holdings rose from 7000 to 84,221 in the same period. There were also tenants who farmed large holdings which formed parts of even larger estates; of these there were 7772 in 1901.

Since 1892 the government has consistently tried to improve the position of tenants by insuring long terms, just rents and fair conditions and has aided tenants to purchase land. Under the Land Purchase Act of 1918 over 100,000 tenancies on private lands were converted into freeholds by 1928. Similar acts subsequently passed have affected ecclesiastical, civil and state lands. The act of 1922 provided for the compulsory sale of estates for purposes of colonization. By 1924, 64,000 new peasant holdings were created, partly on state land and partly on land taken from large estates. The disposal of any holdings acquired through government loans is restricted by law.

In the countries settled by the English the influence of British tenure has been obvious. Colonial America was settled on the semimanorial system which characterized English landholding in that period. The theory on which the crown gave grants in America to companies and to individuals was that ultimate title remained in the king; and in order to signify the relationship between the latter and the grantee a quitrent was usually stipulated. The smaller holder by an extension of the same feudal theory owed a quitrent and fealty to the proprietor of the colony, although he was completely independent in the control of his holding. The quitrent was due not only from freeholders but also from leaseholders, who were supposed to pay it in addition to the ordinary rent; and it existed in all the colonies except Massachusetts Bay, Plymouth, Rhode Island and Connecticut, where tenure was alodial. Although they were sometimes merely nominal and never constituted a serious burden the quitrents were resented by the colonists and frequently left unpaid. When they were paid, there were insistent demands that they be ap-

plied to the public revenue. After the revolution they were abolished in most of the states and became dead letters in the others, so that now all landownership in the United States is allodial.

While village settlement was attempted, especially in New England, it yielded everywhere to separated farmsteads. The medium sized farm was the rule in the northern and central colonies except in New York, where the Dutch manorial holdings in the Hudson valley were confirmed by the English governors. The Dutch estates comprised from 50,000 to 1,000,000 acres, but for cultivation they were broken up into smaller units. In the south there were a number of large plantations which after the Civil War and the emancipation of slave labor were broken up into small farms usually rented on a crop sharing basis.

After the revolution large quantities of public land were available for settlement and later more was acquired by purchase and treaty. Its distribution was effected at first by sales, which led to the accumulation of large holdings by individuals, and later by preemption and homesteads, which fostered a more equitable distribution of landownership. It was only after 1880, when most of the good land had been occupied, that tenancy, which had existed even in colonial times, became an important factor. The agricultural depression following the era of land speculation after the World War, with its accompanying inflation of land values and mortgages, has accelerated the trend toward tenancy. The percentage of tenant farms has risen from 25.6 percent in 1880 to 42.4 percent in 1930. Tenants hold their land generally either on payment of a cash rental or of a fixed amount of the crop or, especially in the south, on a crop sharing arrangement in which the landowner provides the capital and directs cultivation. The usual lease is for a year.

Holdings are today predominantly of small and medium size. The larger holdings are more prevalent in the west, where capitalistic farming is common. In 1930, 44.8 percent of all the farms consisted of from 20 to 99 acres; 36.8 percent from 100 to 500. Of the remainder farms under 10 acres constituted 5.7 percent, while those of 1000 acres or more were 1.3 percent.

When the British conquered Canada they assumed sovereignty over the French settlements, which had been established on the feudal system of land tenure prevalent in France during the period of colonization. On the manors of New France, however, there was usually no absentee

proprietorship and the obligations of the peasants, or *habitants*, which included rent, reliefs, *banalités* and the *corvée*, were not onerous. The obligations of the seignior included the payment of the mutation fines, the cultivation of the land and after 1711 its subinfeudation. Rents were paid in money and produce and were fixed by agreement or the custom of the community. For political reasons the British perpetuated the existing feudal system and even contemplated extending it. It had, however, begun to lose its vitality even before the conquest, and in the following century its abolition was demanded partly on the ground that it interfered with free transfer and partly because many of the British who had become seigniors and were generally more exacting than the French with their tenants had excited sentiment against it. The transformation of feudal into *franc-aleu roturier* tenure, which was very much like free and common socage, was effected essentially by the compulsory act of 1854. French procedure in regard to alienation, devise and inheritance was retained. The obligations of the *habitants* were replaced by a fixed annual rental, which could be terminated by a lump sum payment; but of this privilege they were slow to avail themselves.

In English speaking Canada freehold grants were made, subject to a quitrent and the obligation of partial cultivation. Nevertheless, great blocks of land were accumulated by speculators. The central administration attempted to check this abuse, which was leading to economic stagnation and political unrest, and to foster small family tenures. After they had attained self-government the provinces continued this work by disposing of lands through sales on easy terms and through homestead laws.

The heavily wooded areas of eastern Canada prevented the development of large farms, and the types of land utilization which have developed in this region, such as dairying and fruit growing, have kept holdings pretty much to the original size. In Quebec French laws of inheritance favored subdivision and the great majority of farms in eastern Canada are of less than 200 acres, perhaps too small for remunerative cultivation. In the grain growing prairie provinces of the west the dominant type of holding introduced was the free homestead of 160 acres. At various times preemption of additional land has been permitted. The average farm, which is much larger than that prevailing in the east, was of 335.4 acres in 1916 and 358.4 in 1926. The character of the land and its product, the increas-

ing use of machinery and a certain amount of land speculation have contributed to this growth in size. As in the United States the exhaustion of good homestead land was followed by the development of tenant farming, which is more important in western than in eastern Canada. Nevertheless, Canada remains a country of small family farms cultivated by their owners.

Australia like Canada was subjected to the free grant system and its abuses. This came to an end in 1831, when as a result of Wakefield's influence land was ordered sold by auction at a minimum price successively raised from 5/- to £1 an acre. Since much of the best land had been alienated, Australia became "the dearest land market in the world" and settlement ceased; even in South Australia, where Wakefield's ideas received special application, the results were rather poor. More important in its influence upon land tenure was the rise of the wool growing industry. In 1827 within the nineteen counties of New South Wales the extensive runs of the pastoralists, who had soon established themselves as squatters on the public domain, were placed under annual licenses and fees. In 1836 licenses were granted for areas beyond these counties, but the holders had no security of tenure nor property rights in improvements. But in 1847 the land was ordered divided into three categories, based upon the degree of settlement, and was leased to the grazers for periods ranging from one to fourteen years; during the term of the fourteen-year lease the lessee had exclusive rights to purchase the freehold. In other colonies the squatters although powerful were not as firmly intrenched in their privileges and the law was not enforced.

The gold rush, beginning in 1851, brought settlers who eventually turned to agriculture; and soon afterward the agricultural interests introduced the system of free selection before survey, which in many respects resembled the American homestead, although the land was purchased on instalments. But the squatters retained control of the land by devious means and converted their leaseholds into extensive freehold estates. The small family holding gained significance when technical advance made possible the development of grain raising and dairying and when foreign markets were provided. It was furthered by legislation to assist small holders financially and otherwise and to break up large estates suited to cultivation by voluntary or involuntary sale to the state, and possibly also by the tax on land. The pastoralist is now given land

beyond settlement limits on leases for terms as long as twenty or forty-two years, sometimes with periodic revision of rentals. The small settler generally acquires land on "conditional purchase," which includes residence and improvement conditions, with twenty years or more to pay. The Labour party has wherever possible replaced alienation in freehold by perpetual leases and periodical reassessments of rents. The differences between conditional purchase tenure and leasehold have become almost infinitesimal, and it is doubtful whether the latter will prevail outside of territory under Labour control.

The dominant form of land tenure on the Australian farm is freehold. A certain amount of tenancy has also grown up on private lands; for wheat raising, dairying and other agricultural pursuits share farming has developed in New South Wales since the 1890's. Absenteeism has been considerably reduced and the number of very large holdings has steadily diminished; the latter process has been aided by the high prices for land which have characterized boom periods. Although small holdings have been increasing in number, many are added to neighboring larger holdings by sale; the number of medium sized and moderately large holdings does not seem to be declining and may even be increasing. A study of the size of holdings in Australia must take into consideration the fact that the environment tends to make a small holding much larger in actual area than a similar holding in Canada; this is particularly true in the case of land devoted to grain growing.

Early in the course of its colonization New Zealand threatened to fall into the hands of land speculators, but this danger was checked by the British government and its representatives. The principle of the sufficient price was introduced into the alienation of public lands, and by 1850 compact settlements on the Wakefield model had been established in various areas more successfully than in South Australia. Sheep raising developed, however, and in 1851 the New South Wales system of pastoral leases was introduced. About the same period legislation to establish small settlers was enacted, and there took place the struggle of pastoralist and agriculturist, with the same results as in Australia. Provincial control of the disposal of public lands permitted land speculation and the growth of large estates, and although the provinces were abolished in 1876, it was not until the 1890's that effective land reforms were instituted. They included financial assistance to farmers, a progressive tax

on unimproved land value and compulsory repurchase of land for resettlement.

In 1882 there had been introduced perpetual leases of small holdings on the crownlands, providing for revision of rentals after the thirty-year initial period and after the subsequent renewal period of twenty-one years but permitting purchase of the freehold. Under the reform system there was substituted a lease for 999 years, known as "lease in perpetuity," with freedom from revaluation but not from the graduated land tax. The right to obtain the freehold was withheld; but under another tenure, known as "occupation with right of purchase," land could be taken up for twenty-five years at an annual rental and at the end of a certain period could be acquired in freehold or upon lease. After 1926 no more leases of this type could be made. Freeholds could also be obtained for cash. The various reform measures together with rising land prices aided the development of the small family holding and the break up of land monopoly; compulsory measures were used only sparingly. In 1907 the leases in perpetuity were abolished and tenants holding them were given the right of purchase; the principle of freehold has since been constantly extended, even to pastoral tenancies. The entire controversy over tenures has been complicated by the question of speculation and has been relatively unimportant, since much of the best land was alienated in freehold before the reform era.

The characteristic form of rural property in New Zealand is the small dairy farm held in freehold. Share tenancy has also developed, especially upon dairy farms. The terms are settled by bargaining; frequently there is inserted in the agreement a compulsory purchase clause which enables the share milker to acquire the land and stock.

In South Africa the Dutch East India Company had introduced freehold tenures for small agricultural holdings in order to insure the necessary agricultural supplies. It had also encouraged stock raising and for this purpose leased or loaned extensive tracts of land (over 6000 acres) for a year at a time at a uniform fixed fee. As the market for agricultural produce was limited and as capital and labor were scarce, the pastoral industry naturally developed; with it spread the loan tenure system, which had been designed for it and which became the dominant form of holding in the eighteenth century. The company favored it as a source of revenue. The scantiness of pastures and lack of water in the

interior, which kept the stockmen constantly moving, or trekking, made the short term of the loan tenure desirable. Conversely, however, its insecurity favored the trekking habit; and to correct this evil new forms of holding were introduced, but they were less attractive and remained comparatively unimportant. The disadvantages of loan tenure to the tenant with respect to sale, inheritance and insecurity seem to have been more potential than real; but in 1813 the British, noting the economic defects of the system allowed the conversion of loan leases into perpetual quitrent tenure, which was also to be the form in which subsequent grants were to be made. Conversion of the loan tenures was very gradual. Some holdings of a different character were converted into absolute freeholds. Although since 1860 it has been possible to transform quitrent tenures into freehold, both forms have continued to exist down to the present.

The securing of revenue seems to have been the determining factor in land tenure in Cape Colony and Natal throughout most of the nineteenth century. The stricter land policy of the British contributed to the trekking which resulted in the founding of the Boer republics, where land was given out in freehold or quitrent tenures in the extensive plots that had characterized the colonial period.

The extensive areas of the holdings and the great risks of South African farming facilitated the growth of share farming by natives, who often remained as squatters upon the land when it was divided among the white settlers. The exhaustion of the supply of fresh land, the agricultural revolution which resulted in the ruin of many farmers who clung to the highly inefficient methods to which they were accustomed and a system of inheritance favoring extreme subdivision have led to a landless class of "poor whites," who have also supplied recruits for the ranks of tenant farmers. The tenancy agreements have no general form and are oral and informal. Changing conditions and the competition for land have tended to break down the customary system, under which the white tenants were relatively well off, and to depress them to the status of mere agricultural laborers receiving wages for the cultivation of their plots. The condition of the native is even worse, for his opportunities of holding land are in most of the provinces restricted by law; in the Orange Free State native share agreements have been outlawed entirely. A considerable amount of cash tenancy has developed, however, with tenants drawn from

the better class of white share farmers. Among white tenant farmers cash tenants are more numerous than share tenants, and while tenant holdings constitute more than one third of the total number of white men's holdings they cover less than one fourth of the area occupied by whites.

Very little has been done to check the growth of large holdings nor has public attention in general been centered on the reform of the land system. Although measures to facilitate land settlement were taken by the provinces before union and since then by both the provinces and central government they have not gone to the root of the problem. These measures include financial aid, subdivision schemes and alienation of public lands on lease, usually with purchase rights; the purchase of pastoral areas has also been made possible.

HEINRICH CUNOW

EASTERN EUROPE AND NEAR EAST. A survey of land tenure in eastern Europe discloses great geographical and temporal variations as well as many paradoxical traits. In earlier periods although the region was under the sway of great empires it contained many diverse land systems; at present, although it is divided into a number of states, almost uniform conditions of tenure prevail. Such a change points clearly to a lack of continuity and to the fact that the system of tenure as it exists today is the result not of economic and social evolution but rather of political upheavals. Every fundamental political change upsets the relations between rulers and ruled and in a region which is primarily agrarian is reflected above all in the conditions of land tenure. Hence the paradox that traditional rural ways have best survived where government has been least organized, especially along the route of the great migrations north of the Danube, where neither Roman nor Byzantine nor Ottoman power was able to establish itself. There is also the contrary phenomenon that in recent times, after national emancipation and until the World War, agrarian conditions have been best where Turkish rule had been worst. The various influences—Roman, Byzantine, Slav and Turkish—which have affected eastern Europe have left different traces in various parts, depending upon political circumstances; the corridor between the Danube and the Carpathians, for example, which was a meeting ground for all these influences, was also from a political standpoint a dividing line between them and in some curious way escaped

both the Byzantine feudalism that prevailed south of the Danube and the Germanic feudalism that prevailed west of the Carpathians.

The social structure of rural society is the result of two elements: the relations within the family and village community, and those between the ruling class and the mass of the peasants. Two main types of landholding were prevalent in the eastern half of Europe: the Latin-Germanic type based upon individual and individual family property, and the Slav type based upon joint property. The first was found in the south of the Balkan Peninsula, where even during the Turkish regime it persisted in the highlands, on the islands and on the Dalmatian coast, which was open to Latin influence, and whence it penetrated into the lands of the southern Slavs; it predominated also in the countries bordering upon Russia and subject to Germanic influence. In the Germanic type the ownership of the hide and its management were vested in the individual family. This was also true in the main of Poland, the Baltic countries and certain parts of Galicia, Bukovina and the Banat. In the Slav type the family clan, consisting of parents and of married sons and their offspring, was the unit of economic organization, which took the form of the *zadruga* (*q.v.*) among the southern Slavs. Ownership of land was vested in the family clan as a whole, whose affairs were generally managed by the elder. When the clan grew too large it broke up into smaller groups. The pasture and forests were as in the Germanic system the common property of the villages formed from these groups, but the title to the arable remained in the groups themselves. The tendency toward subdivision continued and the family clan has survived only in the southern Slav countries, where it was favored by the Turkish landowners; here too, however, it is rapidly disintegrating.

Early Rumanian tenure was of an intermediary type. The village lands consisted of undivided meadows, grazing land and woodland owned and used by the whole village and of arable divided into equal holdings, each household being entitled to one. Arable (*țarina*) and homestead were family property, hereditary but indivisible, and the power of the elder to dispose of it was limited by the rights of *protimesis* and of reclaim, even after a judicial decision, vested in his children, relations and neighbors. The holding was thus a joint but not a common property; the system knew neither the absolute individual property of Roman-Byzantine law nor the absolute communal property of the Slav.

Besides the free peasants most Rumanian villages in the Middle Ages contained a group of settlers called *vecini* (neighbors). They were probably originally prisoners of war and were bound to the land. The resemblance between Slav and Rumanian family holdings was held by one school, represented by A. D. Xenopol, C. Disescu and others, to be due to the influence of Slavic institutions; by another school, that of E. de Martonne, N. Iorga and others, it was considered accidental. While the evidence is extremely scant, it gives point to the view advanced by Pârvan and Fotino that Rumanian tenure was of a pre-Slavic type of Thracio-Illyrian origin sprung from agrarian conditions, whereas the Slav probably had its roots in the communal organization of the family ruled by the father or chief, which already existed among nomadic groups when the common property consisted of movables and rights of use.

Upon these popular institutions two rural systems were superimposed: the Germanic feudal system in the Baltic countries and in the provinces of the Hapsburg empire and the Ottoman system, originally theocratic in form but later very similar to western feudalism, in most of the Balkan Peninsula. In Dalmatia and the Ionian Islands other forms of feudal tenure were introduced by the Venetians.

In the Austrian provinces feudal relations were found, after the decline of the Croatian dynasty, as early as the twelfth century, and by the end of the seventeenth century the mass of the peasants had become serfs. Enormous estates were concentrated in the hands of newcomers, who received them as gifts from the emperors. The *kraïna*, or military frontier, formed a peculiar exception. It was a strip of territory along the Turkish frontier which was colonized with Slav, Hungarian and Rumanian peasants, organized into regiments and free from all feudal servitudes, with an autonomous regime not unlike that of the Cossacks in Russia. Each regiment owned extensive tracts of communal pasture and woodland. The system was created in 1630 and lasted until 1881; individual regiments persisted until the reforms following the World War, no longer as military groups but as collective owners. In Poland and Lithuania also there existed numerous estates cultivated on a large scale.

In the domain of the Ottoman Empire the subjection of the peasantry had begun during the decline of the Byzantine Empire. The local nobles entrusted with the collection of taxes used

their positions to encroach upon the land of the free peasants. This tendency was quickened by the feudal ideas brought in through the crusades and especially by the flight of the peasants, which caused various regions to be settled with Slavic serfs. In Serbia the code of Czar Dušan introduced in 1349 a feudal regime, which had already been adopted by the Bulgarian landlords. Thus on the eve of the Turkish invasion the greater part of the land, especially in the plain, belonged to the sovereign, to the nobles and to the church, particularly to its monasteries. Where the landowners offered voluntary submission, the Turks allowed conditions to remain unchanged. Most of the smaller and some of the larger properties were left in the hands of their former owners but subject to an ultimate title in favor of the state (*mirië*) which limited the right of disposal. The properties of resisting nobles as well as land which had once belonged to the state became the domain of the sultan, who was absolute master of all conquered land. Part of the land was granted to Turkish dignitaries (beys, begs and agas), either as freehold (*mulk*) or as fiefs (*mirië*). Ecclesiastical and other properties were handed over to Mohammedan religious foundations and held as *vakuf*. Much of the *mirië* land was by forcible means transformed into the large private estates of the *spahis*, the military governors under whose control they stood. These estates together with the villages attached to them were known as *chiflik*, or *chitluk*, and the servile peasants who cultivated them as *chifchije* or in the northwest of the peninsula as *kmeti*. As in the Roman colonate the land was farmed in *métayage*, the landlord receiving generally one half of the produce of arable land. In the territories of the old Ragusan Republic traces of the original colonate system remained. The severity of the system varied in different parts of the peninsula. It was hardest in the center and in the east; that is, in the broad fertile valleys and in the parts nearest to Constantinople, which alone were inhabited by a dense Turkish population. A considerable number of free peasant owners survived in the western and southern parts; their distance from Constantinople and the main lines of communication as well as the high land and extensive forests, more suitable for pastoral pursuits than for corn growing, favored the imposition of the *chiflik* regime only in an attenuated form. Their relative freedom was also due to the nature of the Turkish administration, which preferred not to interfere with the more inaccessible districts but to leave the local leaders to act as in-

intermediaries between the authorities and the population. It is in such regions that the *zadruga* has survived.

Serfdom disappeared in most countries of eastern Europe about the middle of the nineteenth century not only under the influence of liberal ideas but also as a result of financial necessity; for as the noble landowners paid no taxes, peasant holders became an asset to the state. The Hapsburg monarchy abolished serfdom in 1848 and the peasantry acquired full ownership of their land except in Dalmatia, where even partial liberation did not take place until 1878. In Poland serfdom was abolished in 1864. In the former provinces of the Turkish Empire the national revolutions were to an equal extent social revolutions; and in the absence of a native middle class their success generally accomplished what elsewhere had been two separate and at times opposed steps in rural reform: emancipation from semifeudal conditions and the vesting of the former serfs with the ownership of their holdings. This phenomenon was possible because in such provinces as Serbia and Bulgaria the native ruling classes had been exterminated. The *chiftlik* system thus broke up wherever the frontiers of Turkey receded, except in Thessaly and in Bosnia-Herzegovina. In the latter many members of the ruling class had become Moslems and were able to maintain their semifeudal domination. Austria-Hungary had merely facilitated the voluntary emancipation of the *kmeti*. From the occupation in 1878 until 1910, about 28,500 families were freed; the law of 1911 accelerated the process and 13,000 families were freed on 102,000 hectares in 1912 and 1913. Upon the annexation of Thessaly to Greece by international treaty in 1881 the rights of the Turkish landowners had to be recognized and redeemed and the former duties of the peasants in some measure maintained. In the remainder of Greece the Turkish national estates and those of the large owners had passed to the state, forming two thirds of the arable in the new kingdom; after 1836 they were gradually distributed to small holders against compensation. In Serbia the land was at once occupied in full ownership by those who had tilled it. In Bulgaria the land first passed to the state, but the holders were gradually made into free owners as the state abandoned its title to the *mirié* lands in favor of the cultivators.

In the provinces north of the Danube the Turks had left the agrarian regime intact. The Rumanian peoples had not had an aristocracy: the *cneaz*, or *județ*, was merely the head of the

village in peace and in war, entitled to a holding of his own, to a tenth of produce from arable and to some small labor dues. The labor dues of the *vecini*, the unfree settlers, were heavier but by no means onerous. Because of a number of circumstances the authority of the *județ* gradually increased and many of the free peasants became *vecini*, but it was not until 1595 that the villagers were bound to the land by Mihaiu the Brave.

The latter created a professional army on a feudal basis to take the place of the traditional *levée en masse*; he supported the interests of the leaders because they formed part of the army and allowed exactions from the villagers because he needed supplies. Because of this and other factors there gradually arose a class of large owners, boyars, but they never achieved the power of a Turkish bey or of a western lord. Their title to the land was limited in that two thirds of the estate was reserved for peasant use; every newly married couple was entitled to a holding measured by the number of large animals owned by the household. Moreover as the many princes who followed each other on the thrones of the Rumanian principalities depended on the favor of Constantinople rather than upon the support of the boyars, the latter were seldom encouraged and were sometimes thwarted in their attempts to reduce the holdings and the freedom of the villagers. It was only with the actual end of Turkish domination and its replacement by a Russian protectorate that the Rumanian ruling class, which had never been displaced by the Turks but only permeated with Greek elements, was able to subject the mass of the peasants to real serfdom and to infringe extensively upon their rights of tenure. The *Règlements organiques* of 1831 recognized the former village leaders as the proprietors of the lands which were under their jurisdiction and the concept of actual property in the land as apart from use first arose. The peasants' rights of occupancy were recognized, but their freedom of movement was limited and heavy labor dues were enacted. The general effect of these laws even after their modification was to reduce peasant holdings while increasing the estates of the boyars. After national independence was established, serfdom was abolished in 1864. The peasants were given holdings according to the number of cattle they owned; and many were settled on the state domains. They lost their ancient title, however, to two thirds of the arable and were left with less land than before and with heavy redemption dues and taxes. Large properties were further enlarged

and consolidated. The large estates were except in rare instances tilled by the peasants with their own implements and teams, either under the usual system of sharing the produce (*deavarma*) or under the more peculiar institution of *tarla*, under which the peasants cultivated a piece of land for the owner in return for a similar piece for their own use. Political reasons explain why large personal estates came into being only north of the Danube—those in Rumania of a latifundary character, those farther west and north rather of the Germanic feudal type. In Serbia and Bulgaria the small and medium holding predominated.

The Ottoman land system was extremely complex and substantially different from both the Roman and the Germanic types. It was based upon Islamic law, but the latter was variously interpreted to suit actual conditions. It is not possible to trace a uniform principle through these variations of policy nor a chronological sequence through the various forms, which mostly existed side by side. The Koran prescribed that conquered land should be divided among the victors. Social and economic reasons precluded this when the empire expanded widely and quickly. While part of the conquered land was given to the victorious military leaders against the payment of a tithe (*ushuri* land), in the more distant regions especially it was left to its former owners as tribute paying land (*kharadji*). Except where strategical reasons intervened it was not in the interest of the state to extend the tithe paying private property at the expense of the tribute paying property.

In Turkey proper the conditions which had given rise to the agrarian system had lost their meaning; but because of its religious basis the system remained, bound by tradition. The Ottoman Land Code of 1858, which synthesized and reformed the general laws of tenure, recognized the five orthodox classes of real property, each subject to different rules, which were based mainly upon Islamic and only to a small extent upon Turkish civil law. There was *mulk*, held in absolute ownership and subject only to a special tax. The title could be sold, mortgaged, given in gift, left as inheritance or converted into *vakuf*. *Mulk* included sites of dwelling houses in towns and villages and a limited amount of land appurtenant to them, land given as *mulk* by state grant and tithe paying land as well as tribute paying land which at the time of the conquest was confirmed in the possession of non-Moslem inhabitants. *Mirié* was land of whatever kind

granted by the state to insure proper use and of which the title remained in the state. If the owner neglected the property without good cause the gift could be revoked by the state; this was, however, rarely done. Otherwise the owner of *mirié* could dispose of it in the usual ways after complying with certain formalities that implied the consent of the state, which was never refused. *Vakuf*, which was land held by religious foundations in mortmain, was the most important category, because of its development in the Ottoman Empire (although it also was in existence among the Arabs), where, before the recent reforms, it comprised two thirds of all real property. At the conquest the sultans transformed one fifth of the land into *vakuf*. Private necessity was responsible for its enormous extent, for as elsewhere in the Middle Ages land was given to the church to make its transfer to the owner's heirs secure against political vicissitudes. Very rarely was *vakuf* made absolute: the deed was final, but the donor could lay down conditions both as to administration and the assignment of revenues to beneficiaries. A usual condition was that he and his heirs should remain administrators (*mutevelli*). The general administration of *vakuf*, except that belonging to non-Moslem foundations, was in the hands of a special department, the *Evkaf Mewat* was waste land uninhabited and unused; anyone who cleared and cultivated it with the consent of the authorities acquired certain rights of ownership. *Metruké* land could not be privately owned. The title belonged to the state, which could hand over possession to specific bodies for common use—as communal woodland or pasture, threshing floors, fair and camping grounds.

Turkish law knew the right of preemption (*choufa*) by means of which a third party could prevent or rescind a sale. The joint owner of a property could exercise such a right if the other owner wanted to sell his part; or it might be exercised by the joint possessors of a right of use of such an improvement as a thoroughfare or well on the property to be sold, or by immediate neighbors of such a property. The right of preemption was limited to *mulk*; it could not be invoked by a *mulk* owner with reference to *mirié* or *vakuf*. A similar right of preference (*rudjhan*) applied, however, to *mirié*; and it also belonged to the owner of *mulk* trees, plants and buildings on *mirié* land. Again, a certain number of persons had a claim to *mirié* land if its owner died without an heir capable of succession. This right (*tapou*) belonged, against due payment, to those

who might inherit *mulk* trees or buildings found upon that land; to the partners of the deceased; and to local inhabitants to whom possession might appear necessary. The right of *tapou* was not transmissible by inheritance. When the owner of *miri* died without leaving heirs or claimants of *tapou* or if the latter did not make use of their right within certain periods of time, the land was declared vacant and turned over to the highest bidder. *Tapou* did not apply to *vakuf* lands, which when they became vacant reverted to the pious foundation to which they were dedicated.

Under Turkish law ownership of land did not include the subsoil. Special concessions were needed for exploiting minerals and quarries; they were given for limited periods, usually ninety-nine years for mines and shorter terms for quarries; they were subject to various dues. The possessor of the land, whatever its category, had first claim to such concessions.

The current for reform (*tanzimat*) that made itself felt in Turkey about the middle of the nineteenth century together with the political necessity of improving the position of the Christian peasants led to the law of 1856. This sought to regulate land property on the basis of western principles, with an added obligation to cultivate the land. An attempt was made to suppress fiefs in 1839 and their beneficiaries were replaced by tax farmers and tax gatherers. These in turn were abolished and the Land Code of 1858 provided for direct relations between the government and the peasants. It also forbade the creation of a new *chiflik* except in unpopulated regions, although it did not interfere with those that existed. The reform became effective only with the success of the Young Turk movement. The law of 1913 maintained the various categories of real property but in practise unified their position; *miri* and *vakuf* were allowed to circulate as freely as *mulk*. After the war *vakuf* property, the chief object of reform, was placed under the supervision of a general directorate. As much of the *vakuf* land has been for centuries under private management, the directorate controls effectively only a small part; in 1928 its revenues amounted to only £T3,489,000. The directorate has come increasingly under the control of the state. It is now under the Ministry of Finance, and the government claims the bulk of the revenue for educational and social purposes. Both developments point to an early extinction of the *vakuf* system.

In the absence of all statistics one can make

only general distinctions between large and small property. The former preponderated in European and Asiatic Turkey as in eastern Europe; it was the result, however, not of economic factors but of the power of the ruling class, of the burden of taxes and their promiscuous imposition, of wars and long periods of military service and of general insecurity. The same reasons explain the growth of mortmain and of state and crown domains. In Turkey as generally in eastern Europe large property did not mean large scale farming. Most of the owners were absentees, occupying official and other positions. Some of the estates were farmed under the bailiff system; that is, under the supervision of a bailiff for the owner. Much more widespread was the *yaridji* system, a sort of *métayage* under which a tenant rented the estate and divided it among the peasants, supplying the seed and receiving in return one half to one third of the harvest. Warburg estimated in 1918 that in the various provinces peasants owned 15 to 50 percent of the cultivated area. More recently Sadi has estimated such peasant property at 85 percent. War and exchange of population have no doubt greatly increased the number of peasant owners, but the latter figure must include at least peasants on the state and *vakuf* lands, who although generally left undisturbed are only hereditary tenants.

In Egypt at the time of the conquest the characteristic holding was the large private estate; the peasants were bound to the soil and the organization of the estate was somewhere between the colonate and the manor. Under the Arabs the landed proprietors were displaced by Moslem tax gatherers. Although theoretically all the land belonged to the Arab state, some of the confiscated territory was granted to the Arab chiefs; these holdings, which were alodial in tenure, were called *ushuri* and were subject only to the tithe. The most important category of land, however, was the *kharadji*, or tribute paying land. The system of military fiefs, which had become widespread under Saladin, was adopted by the victorious Mamelukes when they usurped the lands of the earlier fief holders. Under the Turks the land not held in military fiefs was generally under the control of the tax collectors, the *multezimler*, who were given special plots of land upon which the fellahin were obliged to work. The *multezimler* tended to assert proprietary rights in their tax districts and to preempt privileges similar to those of the fief holders. During the Ottoman rule both exercised rights amounting to ownership over their holdings.

The countless predatory privileges assumed by the ruling class through the centuries had deprived the peasantry of most of their rights; the process was completed by Mehemet Ali, who began in 1808 the confiscation of most of the land, assuming for himself as ruler the ownership of almost all the soil of Egypt. From this he made grants to members of his family and to certain notables. In 1858 under Said Pasha a new law gave to the fellahin almost freehold rights in the soil; about one fifth of the arable land, however, still formed the domain of the khedives and was farmed for their account, largely by forced labor. It was only under Ismail that these khedival estates were ceded to the state and divided into individual holdings, each adult fellah receiving from three to five acres of land in ownership.

At the time of the first International Commission of Inquiry into Egyptian Finance in 1878 it was estimated that in 1877 3,487,000 acres of land were classed as *kharadji*, paying taxes amounting to £E3,143,000, while 1,323,000 acres of *ushuri* owned by the native upper class was paying only £E333,000 in taxes, roughly one third of the tax paid by the fellahin. There was also a great deal of *vakuf*, usually rented for long periods. The difference between *kharadji* and *ushuri* has now practically disappeared since both are held in full proprietorship. In Egypt today small holdings predominate: in 1928 out of 2,121,009 landowners 1,964,912 held less than 5 feddans (a feddan equals 1038 acres) and owned a total of 1,697,683 feddans; there were 144,345 owners of between 5 and 50 feddans, who had altogether 1,724,471 feddans; while 11,752 owners of more than 50 feddans each had together 2,002,944 feddans. The owners of large estates usually cultivate them directly with the aid of fellahin, who receive a small money wage and usually also a feddan of ground each to cultivate for their own use. The medium sized holdings are generally farmed by peasants on share tenancies. The smallest holders frequently rent land from larger landholders in addition to cultivating their own plots. Small proprietorships have been furthered by the sale of government lands to small holders on easy terms.

The political readjustments following the World War caused profound changes in the rural structure of eastern Europe. In annexed territories the owners of large estates were often of a different nationality; the peasant soldiers had been promised land. To these factors must be added the general revision of ideas concerning

property and above all the impact of the Russian Revolution. Expropriation and resettlement were carried through in almost all the countries of eastern Europe upon a revolutionary scale and with a wide disregard for traditional conditions. Two main traits are common to these measures: they have swept away all remnants of feudal servitudes, completing in eastern Europe the work begun in the west by the French Revolution; and they have aimed to give some land—and thus economic independence—to most peasants and to as many as possible a sufficient family holding. The latter aim has been reenforced by an effort to prevent the revival of large estates by limiting the amount of land which may be owned by one man. The exceptions are Hungary, where the landed class has regained its former influence, and Poland, where settlement in the former Russian provinces has been used to stave off in some degree the demand for land in Poland proper.

These measures were all inspired by the same social and political reasons; dictated by the need of the moment they paid little attention to custom or to economics, and they were sudden and simultaneous. The general effect has been to render land tenure almost uniformly individualistic and egalitarian and to base it upon use. It has become individualistic in that the number of properties has been enormously increased and that they have been freed of all feudal and other servitudes; even existing financial obligations can be levied only upon the price paid but not upon the land itself (Rumanian Law of 1921, art. 73-76; Greek Law 2052, art. 22; etc.). The egalitarian tendencies are obvious in two facts: the holdings are uniform in size, as fixed by law, based not upon economic or geographical conditions but upon the relation between the available area and the number of claimants; and the remnants of the large estates have also been equalized according to a legally fixed scale. Moreover the land is to belong to those who till it. For this reason mortmain is generally prohibited and in Greece, Rumania and Bulgaria absentees are expropriated, a minimum being left to large owners who used to let their land. The principle is formally proclaimed in a large number of the new statutes (Poland, Resolution of 1919, art. 2; Bulgarian Law of 1921, art. 1; Greek Law 2052, art. 31; Rumanian Law of 1921, art. 122). Linked with this principle are the prohibition against selling or mortgaging either at all times (Greek Law 2052, ch. vi) or during a given period (Bulgarian Law of 1924, art. 15; twenty years; Ru-

manian Law 1921, art. 120: five years after obtaining final title to the holding) and the state's right of preemption in sales of agricultural land. Finally, the same view has led to the transfer of forests to the state or to communes for joint local use (Rumanian Law of 1921, art. 28, etc.; Yugoslav Preliminary Instructions, 1919, par. 17; Bulgarian Law of 1921, arts. 2-4; Greek Law 2052, art. 52; Czechoslovakian special law of 1919; Polish decree of 1919, etc.). In Rumania and elsewhere the state has also become owner of all mineral deposits.

Thus in general ownership now coincides with exploitation. Tenancy has become insignificant: the area available for it is in any case small and the remnants of the large estates can be farmed profitably only by direct intensive cultivation. The essential nature of land tenure is now so uniform throughout the region that differences between countries or provinces relate merely to the size of the holdings.

The change in the distribution of land cannot be stated in exact figures, for the process of transfer is not yet ended and statistics are not complete and are sometimes conflicting. But enough is known to show the enormous change in the relative position of large and small property. In Estonia 1149 large estates covering over 2,000,000 hectares, or 58 percent of the total area, were taken over by the state in 1919. Of this confiscated area about one half, which was made up of woodland, remained under state control and one fourth was left to former tenants, while from the remainder new holdings were to be created. By 1925, 497,746 hectares had been granted to new settlers. In Latvia 1300 baronial estates consisting of 3,000,000 hectares, or almost one half of the total area, were expropriated in 1920, owners being left with 100 hectares each. From these private lands and from state land 43,000 new peasant holdings had been created up to 1922. In Lithuania large estates were to be expropriated, with only 80 hectares to be left to each owner; by 1927, 348,685 hectares had been distributed to 52,963 individuals.

In 1921 in the territory of the new Republic of Poland there were 19,454 private holdings of over 50 hectares covering a total of 10,498,100 hectares. There were only 76,436 holdings between 20 and 50 hectares. Very small holdings up to 5 hectares comprised 2,110,609 holdings, 64.7 percent of the total area. A law of 1920 decided upon the expropriation of from 5,000,000 to 6,000,000 hectares, but by the end of 1923 about 400,000 hectares had been distrib-

uted. Since then transfer has been suspended except for settlements in the White Russian provinces.

In Czechoslovakia 1730 estates absorbed 4,000,000 hectares, or 28.2 percent of the land. The reform aimed to take from the owners everything above 250 hectares, of which only 150 were to be arable. The Czechoslovakian measure is the most carefully planned and applied of all the post-war land reforms and the transfer has been gradual. About 1,000,000 hectares of arable have already been taken over by the state. In Hungary before the World War holdings up to 5 cadastral jugars (1 cadastral jugar equals 1.3 acres) formed 58.8 percent of all properties but covered only 9.04 percent of total area, while estates above 1000 jugars comprised .1 percent of all properties and covered 17.5 percent of the total area. Until 1926 some 900,000 cadastral jugars were divided among 220,000 new holders, thus increasing small properties from 44 to 50 percent of the total area. Holdings of over 100 jugars still cover, however, approximately half of the total area.

In Rumania holdings above 100 hectares covered 42.5 percent of the arable area in the old kingdom; the state has taken and distributed 6,000,000 hectares, thus reducing holdings of over 100 hectares to 7.78 percent of the land in the old kingdom and to 10.44 percent in the whole country; 630,000 peasants had received holdings up to September, 1927. Large holdings were insignificant in old Serbia. In the provinces annexed from Austria-Hungary 2,200,000 cadastral jugars were appropriated by the government up to the end of 1927, of which 837,716 hectares were arable. From it 586,025 hectares were distributed to 210,557 families. In Bosnia-Herzegovina 113,000 *kmet* families, holding 715,000 hectares, were freed. Extensive settlements were also made in Macedonia, including thus far about 11,000 families. In Bulgaria there were practically no large estates; those above 100 hectares covered less than 5 percent of the total area, about 254,000 hectares. Up to the end of 1925 some 35,000 peasant families had received 160,000 hectares, and since then the settlement of refugees has intensified this trend. Large holdings predominated in the annexed provinces of Greece, covering about one half of the arable in Macedonia, Thessaly and Epirus; 716,311 hectares have already been broken up into 125,583 family holdings, varying in size from 15.6 hectares in Macedonia to 3.02 hectares in Epirus. In addition 616,755 hectares belonging

to Turkish and Bulgarian emigrants have been distributed to 120,163 refugee families.

Land tenure in eastern Europe, as its history shows, has never been worked out by simple economic forces. The latest transformation is no doubt the greatest known experiment toward establishing something like social equality upon an individualistic basis. That basis makes the experiment strikingly different from that which is being carried out in the neighboring Soviet Republic. But how different it is also from the customary western individualism is shown by the fact that in eastern Europe the new system of land tenure excludes the two aspects most characteristic of modern individualist society: the accumulation of property and its exploitation through a capitalist technique.

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RUSSIA. This discussion is intended to deal only with Russia proper within its national ethnic limits, including Great Russia, Siberia, Little Russia and White Russia. Land tenure in the western parts of the country, in the Baltic provinces and Poland, reproduced certain features of Germanic development; the eastern parts, inhabited to a great extent by Moslems, followed a course of their own, which, however, coincided mainly with the Russian lines.

The evolution of Russian landownership was conditioned by social differentiation and inequality, for despite an abundance of free lands the economic strength and the social power of the respective classes of the population determined the tenure of land. In the Kiev-Novgorod period (about 800 to 1300) the privileged classes were the owners of agricultural capital, which was at that time a more important factor in land tenure than the actual amount of available land, and they were also able to afford individuals the protection of their persons and property. Ownership therefore vested in the privileged classes, who exploited the land with both slave labor, which was of secondary importance, and the free labor of tenants who were not bound to the soil. The latter received loans in money and kind for their farming needs and enjoyed the protection of their masters. The leaseholds cultivated by the tenants were the possession of the joint family units characteristic of the Slavs.

The privileged landowners formed in their turn a complicated social hierarchy, from the duke and the boyars, large landowners whose sway extended over a great number of tenants both slave and free, down to the so-called

zemtzy or *svoyezemtzy*, small proprietors who used a few slaves and occasionally free tenants and who sometimes labored on their farms themselves. Among the privileged landowners were also the bishops, the churches and the monasteries. The downing dukes, descendants of Rurik, the legendary founder of the Russian states, enjoyed fiscal and judicial jurisdiction over the entire population with the exception of the slaves, who were considered chattels and were the absolute possessions of their owners. The other privileged landowners accordingly had no jurisdiction or right of taxation over the rural population depending upon them but were merely alodial holders, to whom immunity had not been granted.

In addition to the peasant's tenure, with the rent paid in money, kind and various forms of agricultural labor, there appeared apparently at a very early stage land tenure based upon service owed to the dukes or the large landowners. There sprang up ducal, noble and ecclesiastical benefices, whose beneficiaries were slaves and free-men obligated to perform certain services. This institution was in a way analogous to the Germanic *Dienstmannschaft* or *Ministerialität*. The service of the Russian alodial owners was voluntary and they had the absolute right to leave the service of their overlord, the duke, at will. Alongside the alod, which entailed no service, there thus appeared fiefs, created mainly by the state or by the duke.

Muscovite political development brought about the gradual subjection to the state of the originally free landownership of the privileged classes and bound to the soil the freely moving or floating peasant population, which had always tenanted other peoples' land. This process was by no means purely economic; ethnic, political and social factors were closely interwoven. The increase in the power of Moscow paralleled the decline of the Golden Horde, and Tartar and other non-Russian elements worked their way into the tissue of the Muscovite state, holding their land in return for services; their title was thus quite different from that of the Russian alodial holders. The introduction of Tartar and other non-Russian elements into the fabric of the Muscovite state was a process dictated primarily by political considerations. The subjugation of Novgorod by Ivan III, on the other hand, was not merely a violent political change but consisted in the eviction of the Novgorod privileged landowners and their resettlement in the Moscow region, while the Muscovites were set-

tled in the Novgorod district. In the case of both land was given not under the old alodial but under the new feudal type of tenure; that is, tenure contingent upon the performance of military service for the state. State feudalism was the economic foundation of the armed force of Moscow. The so-called *pomestny* system and the dominant role which it acquired arose from the necessities of defense. The services of the gentry were secured by fiefs, which were not merely land grants but grants of estates inhabited by peasant farmers. Thus the transition from the alodial to the feudal system of ownership marked the subjection of the peasants to the privileged landowners, both alodial and feudal. Their subjugation, a natural consequence of the loan system, progressed gradually, until toward the end of the sixteenth century the peasants lost their right of free mobility. Just as gradually by way of individual grants, which by the middle of the same century became the general rule fixed in the written law, the privileged landowners secured seigniorial jurisdiction over them.

The peasants who had been transformed into serfs possessed no subjective rights and could not sue their masters. This does not imply that the Russian law offered no protection to the serfs but that that protection, which was most marked in the eighteenth century, was carried out not through the legal defense of the peasants, who were indeed outside the pale of law, but through police control over the landlords and the repression of abuse of their power.

As early as the seventeenth century and to a much greater extent in the eighteenth there was a revival of the alodial ownership of the gentry at the expense of the fiefs. While the reign of Peter the Great marked perhaps the culminating point in the process of state domination of economic life, the age of his successors was characterized by a reversal of this process in respect to the land tenure of the privileged classes. This reversal was closely related to the tendencies already obvious in the seventeenth century. In 1762 the gentry were exempted from compulsory service and some of them were transformed from mere beneficiaries of the rent paid by their peasant serfs into organizers of agricultural production based upon compulsory labor. The secularization of church land also began at this time.

The original and fundamental form of the peasants' obligations was a tax in kind—either a certain share of the crop, frequently one half, or a fixed quantity of produce; sometimes it was combined with payments in money and a corvée

on the landlord's domain. At a very early stage, especially wherever the peasants were engaged in local and even more in outside trades (*otkhozhiye promisli*), there developed a money tax (*obrok*) which came to predominate over the tax in kind. From the second half of the eighteenth century, with the emancipation of the gentry and their settlement upon their estates, with the expansion of home and foreign markets furthered by the increase of prices due to paper money inflation, in all the parts of the empire where it was profitable to engage in agricultural production for the market the *obrok* was displaced by the *barshchina* (corvée) system; on the other hand, wherever it was profitable to tax the peasants by using the landlords' right of unlimited taxation the *obrok* definitely prevailed. This economic division of the country continued to exist until the emancipation of the peasants and exercised a marked effect upon the actual realization of the reform.

All the farmers who held land on state and crown estates were directly subordinated to the duke; the growing external power of the Muscovite czars contributed to a constant increase of the number of these farmers. On the other hand, large inhabited portions of land were granted, especially in the sixteenth and seventeenth centuries, to monasteries and churches as well as to individual landowners; these estates thus escaped from the direct control of the czars. This process continued even into the St. Petersburg period of the empire. Like the rest of the rural population state and crown peasants were attached to the soil, but they enjoyed personal freedom. Their tenure was the nearest to freehold but did not quite coincide with it. These relatively free peasants, who constituted nearly the whole Russian population of the extreme north of the country, formed in the Novgorod period a class of leaseholders dependent upon the landowning class of boyars. In the Muscovite period they no longer depended upon the boyars but upon the czar and were intermingled with the lower strata of the Novgorod privileged landowners, the so-called *zemtzy* or *svoyezemtzy*. This accounts for the evolution of peasant proprietorship in these regions. Ownership, however, was not individual but vested in the family or household. Subsequently under the direct influence of the social equalitarian enactments of the government, which were dictated by fiscal motives, it gave way in the second half of the eighteenth century to reallocation community holdings.

The Russian land commune, characterized by its peculiar reallotment system, developed late in the history of Russian land tenure and was the result of the methods of taxation imposed by the state and by the privileged landowners and of the pressure of the growing peasant population upon a particular rural area. These factors were conditioned moreover by the absence among the Russian rural population of the institution of landownership and of the habits which it forms. The Russian mir is characterized not only by the common use of naturally indivisible portions of land, such as meadows and forests, which existed also in the Germanic mark with its *allmenden*, but especially by the quantitative reallotments of arable land based upon some conventional or real criterion reflecting ultimately the growth of rural population occupying the given area, and tending to equalize land tenure within the particular social group. In Russia the distribution of the communal lands was generally proportional either to the number of males in the family or to the number of workers of both sexes. This method of distribution differed from the so-called qualitative reallotments, the technical redistribution of arable lands scattered in strips, which does not encroach upon the rights of individual farmers to their share of the given agricultural area.

After the liberation of the gentry from compulsory service in 1762 the subjection of the peasantry lost its significance and justification from the point of view of the interests of the state and the question of the peasants' emancipation was considered. In emancipating the peasants the legislator was faced with a complicated and difficult problem. They were practically the slaves of the landlords, and all the land, which was held jointly by the landlords and the peasants, was from the point of view of the civil law owned exclusively by the former. The landlords regarded themselves as the owners, while the peasants considered the soil which they tilled for themselves as their inalienable property.

At first a course of compromise was followed: the landlords' inalienable right of ownership over the land and the peasants' inalienable right of use were together recognized as the basis of the emancipation reform. This principle, however, turned out to be merely an official fiction. According to the fundamental law of 1861 the redemption by the peasants of the land left for their use was obligatory only when the landlord demanded it. In 1881 redemption was made mandatory for both parties and as a result the

land was finally divided between the landlords and the peasants; in 1881 the peasants' land was recognized as the property of the village communities. This settlement of the relationship between the landlords and the peasants did not imply the creation of individual peasant proprietorship. On the contrary, the great reform did away with prereform peasant ownership, which had evolved from the acquisitions of land by serfs from their landlords and which had been sanctioned first by custom and then by law. By the act of 1861 these holdings went into the general pool of allotments assigned to the peasants. More important, the emancipation ignored individual peasant holdings by leaving the question of property relationships between households or individual farmers to the autonomous discretion of rural communities in accordance with the precepts of customary law. An exception to this was contained in article 165 of the Redemption Statute, which enabled the peasant, by paying before the end of the term fixed for redemption the full amount which he owed, to sever his connection with the rural community even without the consent of the latter and irrespective of whether the communal reallotment principle or the consistently individual or household inheritance principle governed land tenure in his community. This rule, however, was practically abrogated in 1893 and very few peasants became individual owners of their land. During the period between emancipation and the first Russian revolution (1905-06) legislation in general encouraged communal land tenure, although in 1893 the rights of rural land communities in regard to reallotments were curtailed and redistribution was thereafter allowed to take place not more often than once in twelve years.

The evolution of Russian land distribution and tenure between 1861 and 1917 was determined by factors which proved stronger than any of the artificial measures taken to preserve large holdings during the reign of Alexander III (1881-94). In the parts of the country where agricultural production for the market did not prove profitable the landed estates left to the gentry by the act of 1861 passed with increasing rapidity into the hands of the peasants. Wherever such production did pay, the gentry retained the land and availed themselves of the growing competition of the peasants by systematically increasing the rent of leaseholds. These, which were widespread, were usually rented for one year, sometimes for three. They were leased

by individual peasants, by groups of peasants or by whole villages, in which case the rent was often paid in agricultural labor. Share tenancies and money rentals were also common and the latter tended to displace all others toward the end of the nineteenth century. Allotment lands also were frequently leased by one peasant to another. The normal trend in the distribution of land was interrupted by the revolution of 1905-06, which was preceded by agrarian unrest and which, occurring during a period of relatively rising prices for grain, marked the beginning of the government liquidation of large and medium sized estates belonging chiefly to the gentry and their division into peasant holdings. This occurred precisely in those regions where large estates were still economically profitable. A second interruption was caused by the World War: while the prices of agricultural produce rose after 1914, the great diminution in the supply of agricultural labor due to conscription favored the development of holdings whose owners were independent of hired labor, and peasant farming thus came to play a dominating role in the agricultural economics of the country.

The revolution of 1905-06 forced the government and public opinion openly to face the problem of individual peasant ownership, which the authors of the 1861 emancipation reform had endeavored to avoid. From the latter part of the eighteenth century, the age of Catherine II, native and foreign writers on Russian agricultural economics had raised the questions of the distribution of the land among the peasants and of agrarian organization. The idea of individual peasant ownership was clearly expressed in the first and very modest emancipatory measure, the law of 1803 on "free tillers." In the nineteenth century statesmen and economists differed as to whether communal tenure should be maintained or replaced by individual tenure. After 1861 the acts in general favored the land commune; after 1906, however, there was a change in policy. In that year Stolypin as head of the government enacted an emergency ukase on land reform, which became the law in 1910 and was supplemented by the Land Settlement Act of 1911. The Stolypin reform, which marked the first step toward the systematic promotion of peasant ownership in Russia and the inculcation in the peasantry of the spirit of ownership, consisted essentially in facilitating the transition from communal to hereditary tenure by individual households and in furthering in every way the development of consolidated peasant farms. Be-

tween 1907 and 1913, 13 percent of all land in communal tenure was converted into individual holdings. The break up of private, appanage and state lands for sale and lease to the peasants and the settlement of Siberia were also furthered extensively by the new land acts. During the World War the process of land settlement and enclosure was necessarily slackened. Nevertheless, the land legislation together with the operation of economic influences had made Russia before the revolution of 1917 a country in which peasant and small farm proprietorship predominated.

The great results of the reform were swept away by the agrarian revolution of 1917 and the succeeding years. This was not confined to an extralegal and forceful expropriation of the owners of large and medium sized holdings for the benefit of the peasants or to the parceling of the agricultural capital, livestock and implements that had been accumulated on the large estates but implied also the leveling of conditions within the peasantry itself and the abolition of the individual peasant proprietorships created by Stolypin. This trend, which manifested itself from the very beginning of the revolution, was given a decided impetus when the Bolshevik government in 1917 declared all land national property. More significant than this declaration, however, was the fact that many individual peasant holdings were liquidated and a great number of the more advanced peasant farms destroyed.

During the period from 1921 to 1927 it seemed for a time that the formal proclamation of the state ownership of the land would eventually prove compatible with the restoration of all the previous forms of peasant tenure ranging from communal holdings to individual homesteads. Such proved to be the case only to a limited extent, however, and very soon there set in a period of "dekulakization" and of compulsory collectivization. Dekulakization consisted in the complete expropriation and deportation of the well to do peasants, who were called kulaks. The first stage of this process went as far back as 1918, when the committees of village paupers enforced equalization of landownership among the peasants. The second stage, that of 1929-30, was connected under the so-called Five-Year Plan with the policy of forced industrialization and the collectivization of agriculture, which were to be effected as far as possible upon a wholesale scale. Farm dwellings and implements as well as land were confiscated and individuals and entire families were deported beyond the

boundaries of their village or even the villages of their region. This was done under the terms of the ordinance of 1929, which also abolished the general legislation that with certain limitations had permitted individual peasant households to lease land from others and to use hired labor. Collective farms receive from the Soviet government important privileges, especially in matters of taxation and credit; while in 1928 they had absorbed only 2 to 3 percent of all peasant holdings, because of the aggressive methods of the government and the support of the poorest peasants they had absorbed from 40 to 50 percent by May, 1930. The rate of collectivization was somewhat retarded by Stalin's order against forcible collectivization in the spring of 1930.

The collectivization of land is an essential feature of the state controlled economy which characterizes Soviet Russia. Through the collectivization of peasant land as it was carried out in 1929-30 the state controls nearly the entire agricultural production of the country. The state farms, or *sovkhozy*, established on large nationalized private estates have been of comparatively little importance. The future evolution of the Soviet system of land tenure depends upon a great number of ever changing political and economic factors both within and without the country.

PETER STRUVE

INDIA. With its variety of physical features and agricultural conditions, its long checkered history of conquest and assimilation of various races and peoples, India presents a great complexity of land tenures. The problem of the ownership of land in the Hindu period is still unsettled. According to one group of scholars, including B. H. Baden-Powell, ownership was vested in the king while the peasants were merely rent paying tenants. Others hold that the cultivators were the proprietors and that the king's right was limited to taxation. W. H. Moreland suggests rather pertinently that ownership in the modern sense probably did not exist at all and that the question is rather whether or not the peasant's right of occupancy was held subject to the king's pleasure. The whole question is somewhat academic, for the landholders certainly had some vested interest in the soil they cultivated and a share of the produce, whether it be called rent, tax or tribute, went to the king.

The lands of related joint families were organized into village units. Landholding was individual in that the families had proprietary rights

to separate plots of arable land. In addition there were common grazing fields and common woodlands. Originally the village communities were composed of descendants of a real or traditional common parentage. In some villages strangers were gradually admitted as permanent tenants, and when the competition for land became stronger temporary tenancies arose. Social stratification appeared, based on length of tenure and bearing some analogy to the superiority of ownership of land. Lands held by permanent tenants, like those of the original landholders, could be inherited, mortgaged and sold. In the case of mortgage and sale they had to be offered to the inhabitants of the village. The permanent tenants paid a customary rent and unless they defaulted could not be ousted. Temporary tenants paid a contractual rent and were either tenants at will or from year to year. If they lasted longer than a generation, temporary tenancies were convertible into permanent ones.

As early as the Vedic period the village community established itself and the king claimed his *bali*, or tribute, from the peasants collectively. Collective assessment from the entire village was the method which prevailed in India throughout the later periods of Hindu history, one sixth of the gross produce being the standard revenue. The revenue was collected in kind, at first through the headman of each village, who apportioned it among the cultivators and was permitted to keep a portion for himself. As the states grew larger, various intermediate officials between the headmen and the crown were appointed to collect the taxes and in payment they were allowed the revenue from part of the land. Revenues were also assigned to temples, to chiefs for conquests or for submitting to the superior rajahs and to public servants as rewards. In certain cases grants of contracts for revenue farming were made to individuals. All these rights tended to become hereditary and the class of persons who enjoyed them became an aristocracy which, whenever the central government became weak, transformed their right to the revenue into a right in the land itself. In the meantime they depressed the position of the cultivators into a kind of tenancy. This overlord class which developed became known as zamindars.

The Moslem conquest theoretically changed the nature of tenure, because according to Moslem law the conqueror was the owner of the soil. From a practical point of view the Hindu and Moslem systems of taxation were so similar that

the newcomers adopted with certain modifications the existing tenures and tax systems. The government's share of the produce was increased to between one third and one half. Collections were regularized and cash payment by headmen or tax farmers became the ordinary rule. In certain reserved areas taxes were collected directly from the peasants. By the middle of the seventeenth century zamindars, assignees and farmers of land taxes had greatly strengthened their position. They collected the great bulk of the revenue and took as much as the cultivator could afford to give. The assignment and contracts were usually for short terms, but with the collapse of Mogul administration the position became hereditary in many cases.

When the East India Company obtained possession of Bengal, Bihar and Orissa they found it difficult to allocate the different rights in the land. They utilized the older assignees and zamindars and also in some instances deprived these groups of their rights by auctioning off the revenue for collection. Because of a variety of circumstances the system proved a failure, and in 1793 a permanent settlement was introduced by Lord Cornwallis. While the British regarded it as impolitic to contest the rights of hereditary rajahs and nawabs who existed in Bengal at the time, there was also a confusion between Bengal zamindars and English landlords. Accordingly the zamindars were recognized as practically the owners of the land and were made responsible for a cash revenue fixed in perpetuity, with the result that the immemorial rights of the *khud-kasht* ryots to a customary rent and permanent tenure were almost completely effaced. Some provision was made for the protection of the older tenantry, but enforcement was difficult because the settlement was made only with the zamindars. The amount of revenue due from the latter was high; there were many defaults, the estates were sold to speculators and the peasants suffered from oppressive exactions. Subsequent laws passed to aid the zamindars in the collection of taxes abrogated even further the rights of tenants, and within fifty years a complete change took place in the ownership and in the other interests in estates.

In many respects the series of land laws enacted in Bengal since 1859 has given legal force to the old customary rights of cultivators, which the permanent settlement had left unascertained or actually obscured but with this difference: the Bengal Tenancy Act of 1885 aimed at securing a fair rather than a customary rent. The zamindar

system was afterwards extended to the Benares division of the northwestern provinces of Agra and Oudh. One sequel to the permanent settlement in Bengal has been the subdivision and subinfeudation of rights in land. The zamindars leased out their interests and the lessees did likewise, so that there was created a long chain of rent receivers and rent payers known as *patni-dars*, *dar-patni-dars* and *se-patni-dars*, who intervened between the state and the actual cultivator. Proprietary rights in eastern Bengal are often seven and eight deep; each of these strata of proprietorships is divided up horizontally among a number of sharers. This has resulted in the levying of numerous *abwabs* (special additional assessments) and other illegal assessments.

A variant of the zamindar system was established at a later period in the central provinces, where under the Mahratta rule the revenues of the villages have been farmed out to individuals called *malguzars* or *patels*. These *malguzars* were converted into proprietors by the British, although not in the same sense as in Bengal. Since each cultivator claimed the exclusive ownership of his plot, the settlement had to determine how much the cultivators were to pay the *malguzars* as well as the amount due from the latter. The *malguzari* settlement is liable to periodical revision. Similarly in Oudh smaller chiefs, revenue farmers and *jaghirdars* were transformed into proprietors and obtained special promises and privileges from the British after the mutiny of 1857. Munro when governor of Madras found that in the greater part of the Madras territories the village headman was still the collector and rentier of the village. The village communities which still remained complete entities were ignored and engagements were entered into with individual ryots, who thus hold their lands directly from the government. Munro based the Madras system on an error and the error spread to Bombay. It is well known that the early assessments in Madras, Bombay and most other provinces were too heavy and caused agricultural distress. At each periodical settlement the officials tended to find that the government was entitled to a larger share of the produce. The "ryotwari system" was later established in Berar and with some modifications in Assam and Burma.

In the Punjab and the United Provinces the village communities were founded mostly by agricultural tribes, clans and castes, who formed compact brotherhoods called *bhaiyachara*. The Rajputs and other military, aristocratic or at any

rate non-cultivating classes, however, regarded themselves as superior to the rest of the agrarian population and through conquest, usurpation or grant created landlord villages. These bore down upon the rights of the earlier joint communities, who once enjoyed lordships of the villages and are now generally reduced in their turn to inferior proprietors. Common lands and grazing grounds, collective irrigation and economic management in all types of village communities have survived the vicissitudes of history. Although at the beginning attempts were made to settle the villages on a permanent basis with revenue farmers or other persons of note, the important British settlement was made with the community as a group, the village being responsible for the payment of the revenue. But even in these mahalwari settlements there is a tendency of the British revenue officers to maintain the collective responsibility only nominally. They have advanced toward individual assessments and in practise have treated the coproprietors as individual proprietors.

The supersession of the ancient rights of the village communities by the creation of rent collecting landlords or by state landlordism has not been favorable to the peasantry and to village life as a whole. In Bengal, Bihar, the United Provinces and the Central Provinces there is to be found the same story of mistake and subsequent rectification in which full proprietorship was first given to zamindars and malguzars with the suppression of the rights of the village communities, while later on occupancy status was established to a more or less complete degree and the inferior tenants were protected from arbitrary treatment. A series of tenancy laws, however, cannot check all the abuses of the irresponsible and absentee landlordism which has been created by the British government. The landlords have encroached upon and restricted rights in the village commons, neglected their duties toward irrigation, levied illegal cesses and displayed little practical interest in the improvement of the condition of the tenants. Thus the relations between the landlords and tenants today are on the whole unsatisfactory, and they become severely strained whenever the inferior landlords treat the ownership of land simply as a financial investment by employing a long series of middlemen who widen the cleavage between the actual proprietors and the actual tillers of the soil. Nor is the increase of middlemen confined to the permanently and temporarily settled tracts. About 52 percent of the lands in British

India is held under the ryotwari system, and in 48 percent there is an intermediary between the cultivator and the state. Even in the ryotwari tracts there has been a large increase in tenancy. It is estimated that in Madras and Bombay because of the prevalence of subletting over 30 percent of the lands are not cultivated by the tenants themselves. In the Punjab alone the number of rent receivers has recently increased from 6,026,000 to 10,008,000. These conditions have lowered the economic status of the actual tiller of the soil.

The excessive cutting up and scattering of holdings, the conflict between the richer and the landless peasantry and between the cultivating and money lending classes are all recent evils which have been aggravated by the British misunderstanding of the Indian village tenures. Holdings are extremely small and scattered in ridiculously small plots. In one village investigated in the Deccan the average sized holding decreased from 40 acres in 1771 to 7 acres in 1915, at which time 60 percent of the holdings were less than 5 acres. The small size of the holdings is due both to the pressure of population and to the laws of inheritance. Attempts have been made to cope with this excessive subdivision by the formation of cooperative societies in which the holdings are consolidated. The increase of the landless classes from decade to decade, the transfer of land to money lenders and the multiplication of a class of intermediaries who profit from the complexities of the present land system are symptoms of an inequitable system of distribution. Rents are very high; the landlord in most provinces has become a rent receiver rather than a wealth producer and contributes a relatively small portion of his surplus toward the upkeep of the state, while the cultivator of the uneconomic holding, a class which includes the majority of the agricultural population in many provinces, is often left with a pitifully inadequate surplus after the payment of his rent or revenue and interest. The systems of tenure have created an Indian agrarian problem which today has its social and political repercussions and which has led the peasantry to enter with enthusiasm into the "no rent" program of the passive resistance movement.

RADHA KAMAL MUKERJEE

CHINA AND JAPAN. The oldest source of information concerning land tenure in China is the *Yukung*, the tax register which dates from the reign of Emperor Yu, who founded the Hsia

dynasty about 2200 B.C. Although the records are somewhat obscure, it appears that during the Hsia period all land belonged to the state. At the age of twenty every man was given a plot which he retained until his sixtieth year, when it reverted to the state. The tax rate was one tenth of the total yield of the land but the produce in which it was payable varied in different localities; taxpayers nearer the capital paid in bulkier produce than those whose location made transportation difficult. This was known as the *kung* system. The cultivators of the central province, Chi Chow, paid their tribute directly to the emperor. In the other provinces the feudal princes acted as intermediaries, presumably sharing the taxes with the ruler.

Such an uncertain system of state revenues proved impracticable when as the result of the increasing intercourse of the Chinese with the peoples of the south and west a more complicated system of government replaced the old tribal court. A new revenue system implied a new system of land tenure and before 1700 B.C., when the Hsia dynasty gave way to the Shang dynasty, *tsin tien* (*ching t'ien fa*) tenure was officially adopted. All the arable land was divided into allotments of 630 *mou*. One *mou* was equal to 100 *pu* and 1 *pu* was 6 *ch'ih* square; the *ch'ih* was slightly longer than the modern standard, which is approximately 14 inches. The areas of 630 *mou* were subdivided into nine square parts. A central square was reserved for the emperor while the remaining eight parts were distributed to eight households, which cultivated their own private land but cooperated in tilling the emperor's plot, the total yield of which went to the court. Part of the emperor's plot was used for the dwellings of the eight households; thus only 56 *mou* remained to be cultivated for the court. No family, whatever its rank, was entitled to more than one ninth of 630 *mou*.

About 1100 B.C. the Chous rising in the province of Shensi conquered Shang and unified China. In the land near the capital and other administrative centers the old *kung* system was restored, but the common tenure for the country remained the *tsin tien*, which the new dynasty revised and perfected. Under the Chous the irrigation system was worked out in great detail. Moats of three different widths were constructed on the basis of the *tsin tien* formation. They gave the cultivated area the orderly appearance of a chessboard and through them water was drawn upstream from the rivers. By this system the cultivated fields of the period were limited to

level lands: thus while the empire possessed an immense amount of territory equal to about one third of modern China, the total cultivated area was given as only 10,000,000 *ching*, 1 *ching* equaling 900 *mou*. The *tsin tien* now comprised 900 *mou* (about 1800 square feet) or 9 squares of 100 *mou* each. The land was classified according to fertility, and distribution was made on the basis of that classification as well as upon the strict rule of the *tsin tien* system. Lands which never had to lie fallow were classified as good, those which lay fallow every other year were medium and those which were cultivable only every third year were poor. A household of seven or more was assigned to good land, while one of fewer than five members had to be satisfied with the less fertile areas. A family which increased in size between distributions was given better land under the new allotment. Another method of distribution was to give a family 100 *mou* of the best land, 200 of the medium or 300 of the poor. Where prairie lands were used each family was given an additional tract of prairie, the size of which varied with the quality of the arable allotted to the family. Land was distributed to the peasants yearly. These rules applied to distribution not only among the agricultural class but also among the commercial and artisan classes, which had developed in the Chou period; although a peasant received five times as much land as an artisan or merchant. This rule too was not strictly followed because of variations in the fertility of the land. The emperor's share and other taxes were collected through the feudal lords. No one enjoyed private property in the land and the farmer was practically a tenant with a vested interest.

The *tsin tien* system did not accord permanent satisfaction. The policy of peace fostered by the Chous led to an era of prosperity which accentuated the rapid increase of population. A shortage of arable land resulted and it became necessary to exploit new lands. Forests were felled and moats and ditches constructed for irrigation. Despite these measures, however, allotments had to be limited to about 70 *mou* and few were able to derive a sufficient livelihood above the tax payments. Poor farmers deserted their lands or transferred their rights in them to the more fortunate.

Meanwhile the sovereignty of the Chous was threatened by the Ch'in kingdom, an extensive territory with a relatively small population in the province of Shensi. The minister of the state of Ch'in, Shang Yang (d. 338 B.C.), determined to

develop the kingdom and introduced an improved system of irrigation, which increased the productivity of the soil. Concluding that the tsin tien system was unwise, partly because of the immense waste involved in the boundary marks and roads, he abolished it about 350 B.C. and permitted each family to have as much land as it could cultivate. The taxation system based on the tsin tien was thus eliminated and taxes were made proportional to the size of the area cultivated by each family. Private ownership and free trade were also permitted. Attracted by these new measures the neighboring peoples flocked into the Ch'in country, where they were permitted to exploit the land. The condition of agriculture was greatly improved and the country flourished. The nation became so powerful that in the reign of Shih Huang-ti (d. 209 B.C.) the surrounding states were conquered and all China was unified. The new dynasty abolished the tsin tien system everywhere and did away with feudalism. Taxes were now paid directly to the central government and became so burdensome that small cultivators gradually sold out to the rich merchants and traders.

The Ch'in empire was conquered by the Han dynasty in 206 B.C. fourteen years after the unification of China. The total arable area at this time is estimated at 32,290,900 *ching*, of which 8,270,500 were actually under cultivation. Despite the lowering of taxes the latifundia did not decline and most of the cultivators were tenants who paid a large percentage of their produce in rent. Theorists considered a return to the tsin tien system the only escape from this situation, and when Wang Mang usurped the Han throne in 9 A.D. he issued an edict nationalizing the lands. The maximum area, cultivated by a family of eight or fewer male members, was not to exceed 900 *mou*. Lands in excess of this amount were to be distributed to relatives or to neighboring farmers. After the distribution no land was to be bought or sold. This attempt met with violent opposition, primarily from the wealthy landowners; and private ownership and free trade in land were soon restored. The supply of arable land did not keep pace with the increase in population. The pressure on the land became more severe; and while the peasants were landless, the latifundia and the power of their owners increased.

During the Han and Wu dynasties several emperors and statesmen vainly attempted to re-establish the tsin tien system or some modification of it. The northern Wus were most success-

ful; they profited by the fact that the wars had led to such a marked decline in population and to such a wholesale desertion of their territory that it was not necessary to expropriate the large landowners in order to effect a distribution.

In the reign of Kao Tsu of the T'ang dynasty there was issued in 624 a new law instituting the *tsu yung tiao* system, which established several types of tenure. Of the *k'ou fen t'ien*, land given for a limited time, 80 *mou* were to be granted to all males above eighteen years except the crippled and the sick, who were to be entitled to only 20 *mou*; widows were to be given 10 *mou*. If a community did not possess sufficient land for such a distribution, the surplus from neighboring districts was utilized. In the distribution, which was to be made every year during the month of October, the poor and those who had served the state were to be given priority. But the standards set forth in the law could not be strictly enforced in practise. The size of the allotments was made to differ according to the condition and amount of land in each community. In some places distribution took place according to the letter of the law; in others allotments were decreased by half and in a few no distribution was made. In sparsely settled areas the merchants and artisans received half as much as the farmers; in crowded areas they received nothing. The land returned to the state upon the death of the holder. Of the *yung yeh t'ien* lands, permanent grants held in hereditary tenure, 20 *mou* were allowed to every person of age, the head of the family being given a similar additional amount. A certain percentage of this land was to be reserved for the planting of the mulberry, the elm, the plum or any other useful tree. Official and royal families received larger amounts varying with their rank and there were certain special tenures for officials and soldiers. Those who migrated from their districts could sell their *k'ou fen t'ien* and *yung yeh t'ien* lands but could not receive further distribution.

Persons who received the *k'ou fen t'ien* and the *yung yeh t'ien* had to pay ten bushels of millet or rice to the state as land tax. An additional tax, which differed in kind according to the produce of the respective lands, and a labor tax of twenty days per year, which was commuted at the rate of three feet of silk per day, were also established. These taxes were all uniform in amount, for it was assumed that there was actual equality in landholding.

After about sixty or seventy years the govern-

ment was unable to enforce its land laws. In a system in which public and private ownership existed side by side, private ownership naturally prevailed when the government had no more land to distribute. The sale of land was permitted and latifundia again rose to the fore. Taxation grew exceedingly burdensome and to relieve it the principle of proportional taxation on land was introduced. The Sung dynasty, which after a short interval succeeded the T'ang dynasty, and other later dynasties made many attempts to enforce equitable distribution, but such grave disturbances resulted that the measures had to be abandoned.

Under the Manchus the land system was further complicated by the military and semi-military tenures. Lands were granted in military tenure to Manchus in return for military service in times of emergency, thus insuring a strong force in case of an uprising of the conquered people. Sales or transfers to the Chinese were forbidden. These lands, usually in large allotments, were located mainly in Chihli and Manchuria and were exempt from taxation and rent. The semimilitary grants were made to soldiers from land located at strategic points. The tax rate was unusually low, the term of tenure limited and the land inalienable. All other private lands were held in common tenure, which amounted practically to complete ownership; the owners were bound to pay a land tax, a labor tax and a fee on alienation. In addition there were the public lands, held by the government for its own use or for the maintenance of public institutions. Gradually the Manchus alienated their military lands, and these together with the soldiers' holdings became common tenures, which are the predominant form of holding in China today.

These holdings are generally small because of the subdivision caused by the pressure of population and by the law of inheritance, by which all sons share in the land. Where the holding is exceptionally small it is frequently left undivided, the members of the family owning it in common. Independent cultivators often rent additional land in order to eke out a living. The scattered field arrangement is prevalent. While complete statistical information is unavailable, according to recent surveys the most common holding in the north is 4 acres, 65 percent of the holdings being between $\frac{1}{2}$ and $4\frac{1}{4}$ acres. In the wet rice lands of the south smaller farms are general.

Tenancy is common; the *China Year Book* for 1929-30 from a study of fifty farms on the

Chinstu plain by H. D. Brown and Li Min-Liang estimates that 44 percent of the land is owned by cultivators, 46 percent rented and 10 percent partly owned, partly rented. Buck on the basis of a wider survey concludes that owners' farms comprise from 50 to 60 percent of all farms in China and that part owners' and part tenants' farms constitute from 20 to 25 percent. In the north over 75 percent of the farmers are owners; in east central China less than 50 percent.

The conditions of tenancy vary. One system employed is that of share cropping, in which the landlord supplies the capital and shares with the tenant, usually on a fifty-fifty basis. Share renting is also common; the tenant supplies capital and labor and pays as rent usually from a half to two thirds of the produce. Under the cash crop system the rent is a fixed sum. Rents are paid in money, in kind or in both; the percentage of total receipts which go to the landlord varies from 24.6 to 66.6. There are both short and long term leases. Where the tenant has paid a portion of the purchase price for a permanent right of cultivation he cannot be removed while he pays his rent. Leases of government lands are perpetual and the rent averages about one tenth of the produce. In order to ease the land situation the Kuomintang has formulated a program calling for the equalization of landholdings and for the reclamation of the large uncultivated tracts of land. Several plans for taxing unearned increments have been formulated but as yet only minor reforms in land taxation have been instituted.

Authentic Japanese history is said to begin about 660 B.C. Agriculture was then primarily the raising of rice planted in paddy fields. In May prior to the planting the elders of the community led the tribe to the fields and divided the land into sections, which were assigned to the various households. The allotment merely signified the sections from which the respective households were to obtain crops after the harvest. Until about the time of the Taiho Statutes common cultivation was general. It may be inferred nevertheless that an elementary sense of private ownership in the allotted areas existed, since anyone who sowed upon land where seeds had already been planted by another was guilty of the offense of *shigemaki* (double sowing) and was liable to punishment by the gods. When the soil became exhausted the tribe moved on to new lands. By the fourth century B.C. cultivation extended to the flatlands in southern Kyushu,

the Sanin districts in northwest Japan and the area around the present cities of Osaka and Kyoto in central Japan, especially near the banks of rivers where drainage and irrigation were easy.

The tribes in that period were consanguineous groups of which the patriarch was also the chief. He led in the observance of religious ceremonies, was responsible for order in the community and it was through him that orders were received from the gods. As the tribe grew in size and as the factor of blood relationship became less significant, the chief came to be regarded as the proprietor of the community lands.

As the tribes settled down to cultivate their territories permanently, the area of arable land became too small for the increasing population. It became apparent that new lands must be reclaimed, and in order to accomplish this task the elders brought pressure to bear upon the tribe. Because of the growing complexity of the community, penal regulations were drawn up and enforced by the chief. Criminals and prisoners of war were pressed into slavery and set to work at reclamation, while the reclaimed land became the property of the chief. The position of the patriarch became further differentiated from that of the tribesman and he gradually became a lord over his kinsmen, who became his retainers or tenants. In time the lords were subdued and their possessions annexed by the Yamato court.

About 600 A.D. the emperor dispatched scholars to China to study the laws and institutions of the T'ang regime. These scholars were particularly impressed by the limitations on the sizes of allotments of land as compared with the free growth of the latifundia in their native country and upon their return instigated the law of Taikwa which was promulgated in 645 and contained one of the outstanding land statutes in Japanese history. By the law of Taikwa the land system of the T'ang dynasty was virtually adopted. The princes of the blood and the lords of the provinces were prohibited from owning large tracts of land and from subjecting the people to slavish labor. All land was nationalized; a limit was set to landholdings and those who engaged in cultivation had to pay a land tax directly to the court and not to the provincial lords. The law was intended to insure an income for the government and its officials and also to curtail the authority of the local grandees. It was originally put into effect only in the districts under the direct jurisdiction of the imperial court, being applied only to those districts which were less than ten days' journey from the capital; later the imperial

court gradually extended the jurisdiction of the law.

After fifty-six years a revised and perfected law known as the Taiho Statutes was issued, which realized fully the principles enunciated in the Taikwa reform. The Taiho Statutes prescribed in detail the regulation of land tenure. All land was pronounced the property of the imperial court and was divided into public and private lands. The public lands consisted of the imperial lands, some of which were cultivated by compulsory labor while others were let to the peasants for cultivation subject to the payment of rents. In addition there were grants to the shrines (*shinden*, shrine land) and to the temples (*jiden*, temple land) to aid in their upkeep. Schools, women oracles, orphans and the aged were given lands to afford them maintenance. The private lands were distributed to the people; those which went to the peasants were called *kubunden* and resembled the *k'ou fen t'ien* of the T'ang system.

The courtiers received land known as *iden* (rank land); government officials in service obtained *shokuden* (service land); those who rendered unusual service to the court were granted *shiden* (merit land). These four kinds of private land were granted subject to the payment of taxes to the emperor, the last three being more or less hereditary possessions.

Land was distributed to the peasants in the following manner: every male was entitled to 2 *tan* of rice fields (about half an acre) and every female to two thirds of that amount; those under five years of age received no portion. Slaves belonging to the imperial court were granted *kubunden* equal to those of freemen. Slaves in the homes of the commoners were granted one third of the freemen's allotment, while temple slaves had no share whatever. The slaves' *kubunden* were exempt from taxation. The right to *kubunden* applied only to the person to whom it was distributed and reverted to the state at his death. Peasants who received *kubunden* received also a piece of garden land (*yenchi*) varying in size according to the community; garden land could be bought and sold and its ownership was recognized as absolute. Three grades of garden land were distributed: the first grade had to be planted to 300 mulberry and 100 lacquer trees; the second, to 200 mulberry and 70 lacquer trees; and the third, to 100 mulberry and 40 lacquer trees.

As in the Chinese system each recipient of the *kubunden* was subject to three taxes, so (land

tax), *cho* (tribute) and *yo* (labor tax). The land tax was approximately 4.4 percent of the gross yield. The *cho* was restricted to males organized into units according to age and was payable in silks, yarns or other products of the land. Besides the *cho* there was a surtax limited to adult males and also payable in produce. The *yo* (forced labor) was the obligation of able bodied men to give to the state ten days' service per year or twenty-six feet of cloth or its equivalent in other products and also to give an additional thirty days' service per year upon demand. Those who had fulfilled the thirty-day period of service were exempt from the payment of both land and tributary taxes. Substitutes might be sent to serve the *yo*. Still another burden upon the farmers, the *zatsueki*, consisting of sundry labor service, was imposed by the provincial governors, who utilized it for the cultivation of public lands. Under this tax the peasants were liable to sixty days' service per year in their districts. Peasants residing within forty-five miles of the imperial court were exempt. In the course of time there were ameliorations in the amount of land and tributary taxes, but they did not to any extent improve the position of the oppressed agricultural classes.

The Taiho Statutes provided that land which had accrued to the state be redistributed every six years so as to provide for the people who had not shared in the previous division. This rule was strictly observed for about twenty years, after which it was allowed to lapse. In certain districts the redistribution was made after thirty years, in others no redistribution was made at all, and after approximately eighty years the Taikwa and Taiho Statutes became dead letters. This laxity permitted increased trading in land and because taxation was so oppressive many sold their holdings, thus giving rise once more to latifundia.

The Taikwa and Taiho reforms had made generous provision for shrines and temples. Such lands were exempted from taxation, and the priests and monks who controlled them levied only a nominal land tax upon their peasants, who were thus free from tributary and labor taxes. Many people granted their lands to temples in order to make them tax free and then received them back in fief. The shrines and temples were not subjected to interference by the governors, and courtiers who accumulated vast tracts of land sought to make them independent in the same way. The imperial court was petitioned for charters, which were easily

obtainable in most cases because of the corruption in the government. Those who were unsuccessful set up their possessions as de facto manors, refusing to pay taxes either to the court or to the local officials. This made it possible for the manorial lords to offer land to peasants on better conditions than those of the state, or *kubunden*, tenures. The peasants or the manors (*soen*) were subject only to a moderate land tax and accordingly the farmers flocked to them, deserting their own lands. Another factor in the rise of the manor was the voluntary amalgamation of the lands of local farmers and landholders into a manorial unit. Gradually more than half the good lands were absorbed by the manors. The public lands under the jurisdiction of the government were decreased and eventually deserted, and state revenues consequently fell off markedly. The manors vied with each other to increase their territories, until finally they absorbed all the land. Certain lords managed to extend their sway over a great number of manors and a feudal system began to develop. The manor became an economic as well as an agricultural unit and slavery disappeared.

The lot of the farmers under the feudal system was not a happy one, although they were better off than under the Taikwa and Taiho Statutes. Their land was taxed by the lords and they were reduced to serf status. They had the right to cultivate the soil but could not buy or sell it, although toward the end of the feudal period this right was sold. Taxes, which varied with the fief, were based on the custom of the country and bore no resemblance to the complex Chinese system. Besides the land tax there were the *yo* and *cho*, but these were occasional rather than regular and never constituted a real burden. In some places the lord demanded 50 percent of the yield, in others 70 and in still others 80.

Hideyoshi, who unified Japan under his shogunate, in 1590 enforced a uniform ratio of two thirds of the produce but this did not ease the farmers' lot to any appreciable extent. Iéyasu Tokugawa changed the ratio to a half, but he was never able to exact it and the actual levy was about a third. During the Tokugawa period a great deal was done to improve the lot of the peasantry.

With the restoration in 1868 feudalism was abolished and the farmers obtained absolute ownership of their holdings thus maintaining preexisting inequalities in holdings. The right to trade freely in land led to a period of speculation

which coupled with the growth of industrialization led many small landowners to dispose of their lands and gave rise to some larger holdings, although aside from the imperial property there are really no very large landed estates in Japan. In 1924, 2,478,560 landowners owned plots which were less than 5 *tan* (slightly over an acre); 888,623 landowners owned holdings of more than 2½ and less than 7½ acres; 49,695 owned more than 7½ and less than 125 acres; whereas only 4293 owned holdings of more than 125 acres. The great increase in population in addition to other factors led to the spread of tenancy and, by 1903, 44.5 percent of the arable land was worked by tenant cultivators. In 1929, 46 percent of the land was cultivated under lease. Thus in the last twenty-five years, while the growth of tenancy has been insignificant, there has been a marked tendency for small cultivators to rent land in addition to their own holdings because of the difficulty of earning a livelihood. This latter group comprises two thirds of the 58 percent of the population who are farm tenants. The government has tried several schemes for converting tenants into proprietors, but they have not as yet been successful; 99 percent of the tenants have less than 12-acre holdings and the usual allotment is from 2 to 5 acres. From 50 to 60 percent of the crop is collected as rent, which is usually fixed before the crops are gathered. Except in rare cases the contract is not one of crop sharing, although when there are bad harvests reductions in rent are often allowed. The high rents are due in part to the extremely high tax rate, about 11 percent of the value. This rate has been necessitated by the rapid industrialization of Japan, the cost of which has fallen on the land. The tenant farmers, still influenced by feudal tradition, believe that they have a vested right in their land and frequently sell that right. Recently, however, any interest of the tenant beyond his contractual rights has been denied by the courts. The low rate of return from land both for landowners and tenants has led to a popular movement for land nationalization.

YOSABURO TAKEKOSHI

LATIN AMERICA. There are two major types of land tenure in Latin America, the individual and the collective. The two represent different degrees of cultural advancement, different economic principles, theories of government and social tendencies and in the main different racial groups. Many of the social, economic and politi-

cal problems of Spanish and Portuguese America from the days of the conquest have centered around the lack of harmony between the two types.

The most characteristic form is the large rural estate, for which the generic term *hacienda* is used, although it is variously styled *estancia* (in Argentina), *fazenda* (in Brazil), *finca* (in Bolivia and Peru) and *fundo* (in Chile, where *hacienda* is used only for the very largest of the estates). The *hacienda* is not cultivated by the owner himself, who is often an absentee, but by laborers attached to the farm by long term written contracts or by a mutual understanding and firmly established custom, which may have even greater force. In some countries it is cultivated by tenants.

The system of large individual holdings reflects the organization of society in Spain and Portugal at the time when their institutions were transplanted to America. Large estates with serfs or peasants attached constituted the principal form in which land was held, a system which fitted well into the scheme by which the Spaniards and Portuguese established their hold in the New World. Those who distinguished themselves in the conquest were given extensive grants of territory, frequently with the services of native workers, which became the basis of the large holdings characteristic of Latin America today (see LAND GRANTS, section on LATIN AMERICA). The social and political conditions which this system of land distribution helped to create furthered the spread of the system of large holdings, the maintenance and perpetuation of which have also been aided by various geographic and economic factors. In many regions there are areas of light rainfall and scanty vegetation which are able to support only cattle ranches or, if cultivable, require the construction of large irrigation works; here extensive areas and economic resources are required. The tropics, where the white man is usually not inclined to engage in manual labor, have not favored the introduction of a system of small proprietors working on their own land, and the growing demand for tropical products in the world's markets has aided the development of large plantations. In the fertile areas of Argentina and Uruguay, where the development of great cattle ranches was aided initially by a scarcity of labor, the development of a similar world market for pastoral products has helped to perpetuate the system of *estancias*. The exploitation of petroleum deposits has also aided land aggregation; so

too have rising land values. Unearned increments in land have been rapid not only in countries like Mexico or Chile, where the amount of arable land is rather limited, but also in countries like Argentina, where the amount of land available for settlement has not been so limited by geographic causes.

A second type of individual holding is the small rural property, variously styled *chacra*, *rancho*, *huerta*, *hijuela* or *sitio*. Such holdings are far less conspicuous than the haciendas. They are very numerous, however, although their aggregate area is relatively small; most are little more than miniature farms. These also for the most part originated in grants of land in early colonial times, bestowed upon the lower orders of the conquering armies or upon civilians of humble rank. Some are more recently created homesteads conferred upon or sold to colonists who settled in frontier regions or are derived from squatters' holdings on public lands. Still others are parcels of larger properties which have been frequently subdivided through the centuries, a process aided to some degree by measures of agrarian reform. The small property has frequently been subjected to the encroachments of the more powerful hacienda, however, and has therefore tended to exist only under such geographic conditions as have not favored the existence of the latter. In Mexico before the agrarian reforms *ranchos* existed as a rule only where cultivation depended upon rainfall alone, where the supply of water sufficed to irrigate only a few small fields or where tillable land existed in small isolated areas. They were generally not to be found on the land lying along the principal roads and railroads or in the vicinity of the larger towns; this had been taken up by the haciendas.

Except for a somewhat stronger right of eminent domain, a consequence of the fact that in colonial times the crown retained a share of its rights over the royal patrimony which it distributed, and except that titles generally include only surface rights in accordance with the principles of law prevalent in the Iberian Peninsula, neither of the foregoing types of holding is greatly different from the alodial holding common elsewhere in the modern world. In sharp contrast to them is the collective holding. It belongs to a group of persons all of whom are bound together by ties of kinship or by common rights acquired after long established residence in a particular community. Each member of the group enjoys the privilege of sharing with his

fellows the land and other natural resources of the holding, including pasture, game, wood, water and rock, and of being allotted a small piece of tillable land which may be held indefinitely and even passed from one generation to another or may be periodically reassigned to different members of the community. The land is thought of as belonging to all, much as the air or sunlight, and cannot be alienated. It is in no sense an individual possession; the holder has merely the usufruct and his right is limited to a specific term or at most to the time during which he makes use of it.

This scheme of land tenure was common among the Indians of North and South America, few of whom existed under a system of alodial holdings. Even the most highly civilized, such as the Incas, Mayas and Aztecs, held their land in collective fashion; such community lands are still common in Mexico and also in the Andean republics, where the village holdings characteristic of the Inca Empire but apparently long antedating that dynasty still survive among the *ayllus*, or clans, of the Quechua and Aymara Indians. Forms somewhat similar to these clan holdings existed in the Araucanian country of southern Chile and in Paraguay, where they formed the foundation upon which the Jesuit empire in that country was built.

As it survives in a number of the countries today the system of community holdings represents a conspicuous contribution of the Indians to social organization, but the European invaders also contributed in some degree to the maintenance of the system. Collective landholding had existed in the Iberian Peninsula before Roman times and survived, particularly with respect to pastoral and timber land, at the time of the conquest. Such land together with other types was held by towns for the common use of the inhabitants, and numerous towns with such holdings were created in the New World. Many have retained something of their communal character, particularly where the white population has merged with the aborigines.

The collective form of tenure has tended to disappear, however, because of both the growing individualism in the modern world and the encroachment of the neighboring hacienda. In most of the countries, notably in Mexico, Ecuador, Peru, Bolivia and Chile, legislation has been enacted to abolish it and to divide the holdings among the individuals who had rights in the communities. Bolivar decreed the individualization of community lands in Peru on April 8,

1824, and his decree was followed by numerous other measures, some as late as 1893, to make it effective. A wave of such legislation during the middle of the nineteenth century left its mark in Mexico and Bolivia (*see* AGRARIAN MOVEMENTS, section on LATIN AMERICA) and in Chile with regard to Araucanian Indian land (1866). But so foreign to the aboriginal mind is the concept of individual property in land that legislation has had little effect except to expose the Indian farmers to further exploitation on the part of the whites, and in most of the countries the communal system still exists. In Mexico a recognition of this situation has led to the restoration of common holdings, at least temporarily, until the Indian population can be prepared for individual ownership. Even more generally than in the case of the small individual holdings the geographic and economic conditions which have helped to preserve the communal system are those which have been unfavorable to the spread of the hacienda. Communal ownership is found chiefly in out of the way corners, in areas of low fertility which are difficult to irrigate or in tiny pockets of land in mountainous regions. In Bolivia the Indians were left to the highlands as the Spaniards confined themselves to regions where they and their European plants and animals could withstand the cold. In several of the countries where the community system was deeply rooted even the incorporation of the Indians and their lands into a hacienda did not destroy it, and there exists, especially in Bolivia and Peru, the anomaly of a dual tenure—that of the hacienda owner as overlord and the subordinate tenure of the agrarian village or villages within its bounds. While each system jealously maintains its rights, it accords a degree of respect to the claims of the other; the hacienda may even change hands without affecting the status of the community.

Another type of holding subordinate to individual tenure is farm tenancy, which although less common in Latin America than elsewhere is of gradually growing importance. Until the last few decades tenant farmers were few; the upper classes usually owned estates and the landless laborers lacked the resources necessary for working a property. Recent immigration, however, has brought into such countries as Argentina, Uruguay and southern Brazil a relatively large number of foreign laborers, many of whom have sought to acquire land or, failing that, as has often been the case, to rent land which they can farm for themselves; thus there

has resulted a decided increase of tenant farming. In Argentina in fact the percentage of tenant farmers was in 1916-17 about 70 percent of the total number of producers of cereals. In Chile, although the amount of immigration has not been great, the ranks of tenant farmers have been filled very largely by natives of sections of Europe where independent farming predominates. Throughout Latin America foreigners, who come from the United States as well as Europe, are found as lessees of both large and small properties; they have often rented entire estates in Chile, Peru, Mexico and elsewhere. In Argentina, however, the Italians and Spaniards generally lease small farms or sections of large estates. Farm tenancy is becoming more general also among the native population. Large Chilean haciendas are not infrequently rented to neighboring *hacendados* or other members of the upper class and sometimes to ambitious administrators. In some countries tenancy is now quite common among the poorer native classes; for example, among Mexican Indians who were made landless when their communal villages were broken up. In Argentina *estancias* are frequently rented to middlemen and then sublet in parcels.

The rent, which varies greatly in amount, is generally a share of the crop—frequently half in Mexico and Argentina. In the latter country, however, and in Uruguay cash tenancy is much more prevalent than share tenancy. The type of tenure generally depends upon the crop. The rental is frequently onerous. The term of the lease also varies greatly. In many countries it runs from year to year. In Argentina the tenant seldom holds his land longer than five years, the time necessary for the preparation of the land by the tenant's grain crops for artificial seeding with grass, which is likewise done by the tenant. At the end of this period the *estanciero* turns his fields into pasture and the renters must leave. Tenancy conditions are in general regulated only by custom and the wishes of the landowner, against whom the tenant is usually helpless. He is frequently hampered in the use of his land by burdensome restrictions.

Most of the large holdings have remained in the hands of a single family for many generations, or ownership has been transferred within the same social group. Thus there has come to exist a small agrarian aristocracy holding a monopoly of the land. In Chile, for example, it has been officially estimated that 2500 individuals hold 50,000,000 acres of the total 57,500,000 in

private possession and that only one out of every forty persons owns land. Moreover the landed aristocracy, which because of its monopoly has retained an almost unbroken control of the economic, social and political life in most of the republics, constitutes a distinctly marked racial group which has preserved more than any other group the purity of the European strain. Frequently composed of descendants of the white invaders of early days, it occupies in areas in which a large Indian population still survives the position of a conquering race. In a few of the republics, where the aboriginal element was never large, this position is less marked.

In most of the Latin American countries the church has also accumulated extensive holdings, which it has formed into haciendas of great size and value. Although the Spanish and Portuguese governments attempted to prevent ecclesiastical acquisition of large properties in the colonies (the Spanish crown strictly forbade the transfer of land to any religious agency), the church nevertheless received much property through donations from individuals, legacies and foreclosures on estates mortgaged in its favor. The permanency of its organization helped it to retain much of its property and to become the largest landholder in the colonies. In the countries constituted after the winning of independence it has often held or approached this position. It has been estimated that in colonial Mexico not far from half of the landed property was in the hands of the church. At the time of its expulsion in the eighteenth century the Jesuit order held many of the best haciendas in the Spanish and Portuguese colonies. The income from many such properties has been enjoyed by religiously controlled hospitals, orphanages and schools; but so little have the church properties contributed to the economic benefit of anyone except the church itself and so much have they added to the power of the organization that the governments have not infrequently considered it necessary to break up the tendency toward permanent monopolization of land in "dead-hands" (mortmain). The entire holdings of the Jesuits in the Spanish and Portuguese colonies were confiscated and sold at the time of their expulsion. Mexico nationalized all ecclesiastically held property during the reform regime of Benito Juárez. Other nations have from time to time resorted to expropriation. In the presence of this menace the church agencies have tended to dispose of their real estate, turning their wealth into less tangible form, or have

established holding corporations abroad with the hope of avoiding confiscation. Ecclesiastical landed properties, at least those held directly, appear to be fewer than formerly.

The *terratenientes*, as the large proprietors are called, constitute in most of the republics the bulk of the conservative party. Their conservatism reenforced by a close community of economic interest has brought them into close association with the clerical group and the resulting strong combination has dominated most of the history of Latin America. Opposed to this group is the mass of the common people, numerically far superior but less powerful because of its limited wealth, education, cultural advancement and sense of unity. This group, for the most part aboriginal or mestizo, comprises the holders of collective lands and their successors, the peons or *inquilinos*, and the free laborers on the estates as well as most of the urban laboring class, which is frequently drawn from the rural part of the group and shares its lot. The affiliation of the small individual proprietor seems to depend upon the degree of his removal from the aboriginal culture and from the system of collective holdings. Racially he usually belongs more closely to the *hacendados*; economically he has more in common with the great mass. The conditions imposed upon the small tenant also offer little opportunity for social and economic advancement of either the individual or group. Save for the exceptionally able or fortunate individual tenancy is only slightly better than peonage; it tends, however, to give the tenant some little participation in civic affairs, and the tenant is less fixed to a particular property than the peon and less subject to the control of a landlord. Tenancy thus contributes somewhat to the growth of citizenship and to the termination of the feudal relationships which have marked the agrarian life of Latin America. The influence of the peon, tenant and community group has not been as conspicuous as that of the *hacendados* but it has been recognized as important by those who have analyzed the forces operating beneath the surface in many of the countries. Occasionally it has found expression in uprisings—attacks upon haciendas and their owners or actual revolt of the rural population—which are usually described merely as Indian disorders.

While it is more difficult to determine the economic as opposed to the social effect of the dominance of large holdings, the belief seems to be quite widely held in Latin America that

it has resulted in a check on the development of productivity and that it has thus menaced national economic independence. With an absentee owner, a hired administrator and poorly paid peons the typical Mexican hacienda yields little more than enough to feed its numerous population. Where farm tenancy is widespread, economic results are usually better. Nevertheless, in Argentina, which exports both grain and pastoral products, complaint is made against the dominance of the pastoral interest, which checks the spread of cultivation on land suited to this purpose; against tenancy agreements which prevent diversification of crops; and against the brevity of tenancy tenure, which removes incentives for improving methods of cultivation. This situation is held to imperil the country's position in the world's grain markets.

The social and economic evils of the Latin American land systems have brought about legislative attempts to widen the distribution of landownership. These have been most far reaching in Mexico. A beginning has also been made with farm tenancy. For example, in 1921 legislation to regulate tenancy agreements—not, however, universally applicable—was adopted in Argentina. It forbade the placing of certain burdensome obligations upon the tenant, extended to him certain rights of cultivation and of making improvements, with compensation for the latter, and allowed him to retain his holding at least four years. But the legislation was seriously weakened by a specification which limited to 300 hectares the size of any area with respect to which the rights extended by the law could be claimed. Hence by forcing tenants to take up large areas collectively owners were able to evade the law.

A sphere of Latin American land legislation which has aroused considerable interest is that dealing with alien holdings. The danger of allowing large areas to fall into foreign hands constitutes a problem in some of the countries, since it may lead to serious international complications. An example is afforded by the case of Texas: in order to bring about the rapid settlement of its northern provinces Mexico offered free land to settlers; Americans responded more rapidly than Mexicans, soon threw off Mexican rule and then secured annexation to the United States. A new growth of foreign landholding in Mexico has brought about a desire to avoid a repetition of this loss. The constitution of 1917 and regulatory laws of 1925 provide that no foreign individual or corporation may hold agri-

cultural property within 100 kilometers of a boundary or within 50 kilometers of the coast and that foreign holders of agricultural lands anywhere must agree not to appeal to their home government for protection of their interests in the holdings.

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See: OWNERSHIP; POSSESSION; FREEHOLD; VILLAGE COMMUNITY; FEUDALISM; MANORIAL SYSTEM; LATIFUNDIA; LANDED ESTATES; COLONATE; PLANTATION; APPANAGE; SERFDOM; ENCLOSURES; FARM TENANCY; ABSENTEE OWNERSHIP; LANDLORD AND TENANT; AGRARIAN MOVEMENTS; SMALL HOLDINGS; SOCIALIZATION; LAND TAXATION; HOMESTEAD; ALIENATION OF PROPERTY; LAND TRANSFER; SUCCESSION, LAWS OF; ENTAIL; ESCHEAT; AGRICULTURE; SERVITUDES; LAND SETTLEMENT; LAND GRANTS.

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LAND TRANSFER. The transfer of land is much more complicated than that of chattels. The immovability and permanence of land have given rise to numerous complications which make difficult the determination of title and consequently of transfer. Possession in the case of a chattel is usually a sign of ownership, and even when it proves deceptive the purchaser of a chattel does not ordinarily have to concern himself with the soundness of his title because of the

difficulty of tracing a movable. In the case of land possession except in very simple societies is no proof of ownership and the land remains for many years to answer any claim against it. But the threat to the title lies not so much in dishonesty as in the very complexity of land titles. The permanence of land makes possible a hierarchy of estates and tempts the owner to impose his will upon it long after his death, thus creating the problem of future interests. With a multitude of present and future, of possessory and non-possessory interests, the difficulties of transfer are correspondingly multiplied. They are still further increased in some countries by hangovers of feudal interests and by dower and more generally by joint ownerships, mortgages, judgments, tax and mechanics' liens. Then there are questions of boundaries, rights of way, water rights, mining rights and restrictive agreements. In Anglo-American law the ownership of a building may be divided horizontally so that one floor belongs to one person, another floor to someone else. The surface of the land may be owned by one person and the minerals by another. None of these various rights is necessarily barred by an attempt to transfer title; as time passes these interests become more complex. While in the United States the discovery of all possible claims to a piece of real property is fairly simple, in an older country like England the title becomes endlessly involved and theoretically must be traced back into the indefinite past. As long as land tenure remained communal, patriarchal or feudal, alienation remained relatively uncommon and transfer was generally by inheritance. In more complicated and especially in capitalistic societies, where transfer is a continuous occurrence, the problem of determining title and facilitating transfer is of primary importance.

Systems of land transfer both reflect and react upon land law. Formalities of transfer, even though they amount to the mere delivery of a deed, may seriously affect substantive law. Thus the requirement of livery of seisin in the English land law of the Middle Ages had much to do with the developments of the law of estates. So too the sweeping reforms of the Law of Property Act of 1925 were largely a by-product of the struggle over registration of title.

Because of the peculiar qualities of land and their implications the transfer of real property has usually been attended by more solemnity than has been the case with chattels and has been accompanied by a certain amount of

publicity to insure knowledge of the exchange. The notions that land is unique and that it must be differentiated from other property are not peculiar to English law. They were characteristic of Germanic law, and although the difference disappeared for a time in Germany because of the influence of Roman law it has reappeared in the present civil code.

The two great systems of law, the Roman and Germanic, appear to have started with methods of land transfer which were alike in being ceremonial and compassed by a crowd of witnesses but which were otherwise quite different. The method in the classic Roman law was *mancipatio*: in the presence of five witnesses and a balance holder with scales the transferee held a piece of metal in one hand, recited a formula and struck the scales with the metal, which he then gave to the transferor, ostensibly by way of payment. This ceremony did not necessarily take place on the land. The *mancipatio*, however, was employed only for the transfer of Italic land. Elsewhere in the Roman Empire land was transferred by *traditio*, or delivery; and although the *dominium* of Italic land could not be acquired by *traditio* alone, yet at the time when Roman law was at its height it could be obtained by *traditio* plus a two years' *usucapio*, or adverse possession. This emphasis on *traditio* by the great Roman jurists seems to have had a vital effect in those countries where the Roman law was received in the Middle Ages, and even in England in the rigid insistence there on a livery of seisin, or delivery of possession. As the Roman law declined, however, the requirement of a direct transfer of control was abandoned and probably before Justinian, certainly in his legislation, the delivery of documents of title was treated as equivalent to *traditio*. It is probable that at the time of the barbarian invasions the inhabitants of the Roman Empire were transferring their land by written documents.

The early German method was a very elaborate handing over of the land itself. Various symbols were used, such as a piece of turf or a branch cut from the land. In addition there might be the delivery of a spear or a war gauntlet or the knife with which the branch had been cut. Then there would be a formal renunciation of the land by the transferor, emphasized by his leaping over the hedge, making renunciatory gestures with his fingers or throwing into the transferee's lap a little rod or staff known as the *festuca*, a highly favored symbol in formal contracts. Like the Roman *mancipatio* this

method seems to have been strictly private and not a governmental or community affair; both afforded adequate proof, but the Germanic method was more complete as it ended with the transferee in possession and appears to have had more publicity. The law of the Germanic conquerors was personal, not territorial. The Roman inhabitants retained their own law, although not uncorrupted, and undoubtedly influenced the law of their conquerors. At any rate among the Lombards and in the Frankish empire the requirements that the transfer should take place on the land disappeared. The old Germanic symbols were still often used, however, in combination with a written charter, which itself was treated as a symbol. Sometimes there was pretended litigation and a transfer in court. Thus a system of symbolic livery developed throughout the wide reaches of the Frankish empire. With its decay the transfer by charter seems to have gone out of use in Germany but to have maintained its vigor in Italy and in a large part of France. The symbols were retained in feudal transfers but were objected to by the Romanists as an unnecessary part of transfer by charter and finally became mere forms recited by the notary who ordinarily drew up the charter. As recited forms they survived in Italy and France until the period of the modern codes. In Scotland, where the land law is still largely feudal, the symbols continued to be a necessary part of transfers and had to be delivered on the land as late as 1845.

Transfer by delivery of the land or delivery of a charter was supplemented in the Frankish empire by transfer in court, first in the royal court, then in local courts. Transfer in court received a great impetus from feudalism. The lord's court was the natural place to transfer land held of him; in Germany from the eleventh to the thirteenth century it became if not the universal at least the prevalent method of transferring land held of or subject to the jurisdiction of a lord as well as land held in the towns, where the transfer took place before the town council. This method of transfer in the lord's court was known in Germany as *Auflassung*. It continued to be the regular method of transfer in an important part of northern France until shortly before the revolution and in the rest of the region of French customary law was not uncommon in the documents of title until 1789. It prevailed in England as to copyhold land until the abolition of the latter on January 1, 1926. With statutory developments it is the system

which is at present in force in the Scandinavian countries.

Transfer in court involved a court roll, or register—English copyholders were tenants by copy of court roll—and it was only a matter of time before the register became the important element in transfer. The modern register dates back to this system of judicial transfer. In its earlier stages the transfer in court seems to have been transfer by collusive suit. There was precedent for this in the Roman law. On the continent the collusive action in the royal court apparently faded before the non-collusive transfer in the local courts. The process was reversed in England, where the regular method of transferring freehold land after the conquest was by the old Germanic method of livery of seisin with the most important supplement of transfer by collusive act in the king's court. There were two distinct methods, the fine and the recovery. Land held under a fine for a year and a day was with certain exceptions free from the claims of all persons. The recovery enabled one to hold land against those claiming under an entail. On the continent the ordinary transfer in court had some of the same effects.

In any system of law time must have certain healing results if only by the limitation of actions. Aside from the negative aspects it may give a positive title to the possessor. It did so in the Roman law first by a two years' *usucapio* and later by a *longi temporis praescriptio* of ten years if the parties were *praesentes*, of twenty years *inter absentes*. Then there was the *longissimi temporis praescriptio* of thirty or forty years, which was generally negative but might be acquisitive if begun in good faith. The early Germanic law seems to have known nothing worthy of the name of prescription, but the year and a day possession under a fine in England must have been a fairly efficient sort of prescription and the same outcome to possession for a year and a day under a transfer in court seems to have been widespread on the continent. The effectiveness of the fine accounts somewhat for the neglect of the statutes of limitation in England during the Middle Ages and the meager law developed under such statutes down to the abolition of fines in 1833. With the reception of Roman law on the continent the longer periods of the Roman law gained general acceptance.

Modern land transfer systems are of three kinds: transfer by registration of title, transfer by registration of deeds and transfer by deed or contract without registration. Hogg gives the

four characteristics of registration of title as the initial placing of land upon the register as a unit of property; the registration of transactions with reference to the land itself and not merely of instruments executed by the owner; the dependence of the validity of transactions upon registration; and, finally, the characteristic that initial registration and registration of subsequent transactions act in some degree as a warranty of title in the person registered as owner and as a bar to adverse claims. Taking these characteristics as the test, registration of title is the rule in the territory formerly comprised in the German Empire and Austria-Hungary, as it apparently was also in prerevolutionary Russia.

Compulsory registration of title was a natural historical development in the German, Austro-Hungarian and Russian empires. It was a short step from the transfer in court, so prevalent in the Germany of the Middle Ages, with its speedy barring of conflicting claims to the modern land register with its preclusive title. In many of the towns in Germany and in rural Bohemia the land registers date back well into the Middle Ages. The reception of the Roman law encouraged private, secret conveyancing for a time; but in much of the regional law conveyancing retained throughout that publicity which has been considered characteristically Germanic. The purpose of the conclusiveness of the old transfer in court was, however, to bar the claims of kin or community, while the modern bar is in the interest primarily of the investor. Registration of title leaves little place for prescription or the healing effect of time. The record is the important element and investors should not have to look beyond it. Registration greatly simplifies public administration. Its initiation in Austria-Hungary and Germany was aided by historical developments and by prevalent theories of government which exalted the state and minimized the individual. Here the compulsory clearing of titles and boundaries was moreover unhampered by exaggerated notions of constitutional right.

A virgin country offers unusual opportunities for the installation of a land register. No elaborate searching of titles is required and registration is cheap and effective. Sir Robert Torrens secured the adoption of such a register in South Australia in 1858 and in English speaking lands the system has since been known as the Torrens system. The system has had its principal vogue in Australasia and the newer Canadian provinces. The acts which installed the register in these countries provided that all subsequent grants by

the government were to be registered. Title never passes in the case of such land until the notation is made upon the register. Registration of lands granted prior to the acts is voluntary. An insurance fund is built up from charges made on certain types of transfer to pay for any error made by the government.

Title registration is provided for by statute in many jurisdictions of the British Empire, including England, and in many states of the United States. With unimportant exceptions, however, it is either voluntary or its compulsory character is limited; and in none of these jurisdictions, with the possible exception of the Australasian and the recently settled western Canadian, is it the prevailing method of transfer. England in the past had in general neither registration of title nor registration of deeds. It needed one or the other, and in 1862 registration of title won a nominal victory by the passage of Lord Westbury's Land Registry Act. Voluntary registration of title proved a failure, however, and in 1899 registration of title in the County of London was made compulsory on sale. The register has met with the bitterest opposition especially from the solicitors, who regard the searching of titles as one of their primary sources of income; the Land Registration Act of 1925 provided that the area of compulsory registration should not be extended without the consent of the county council until January 1, 1936.

In the United States voluntary registration of title is provided for by statute in nineteen states; the results have been negligible in fourteen. In the metropolitan centers of the remaining five it has proved an appreciable factor in land transfer; but even in its most successful office, at Chicago, only one of every eight transfers has been made under the Torrens system. In California, Illinois and Massachusetts the statutes were enacted in the late 1890's. Investment corporations, with the exception of the title guaranty companies, like the system because it facilitates loans. General registration, however, would mean practically an action to quiet title for every plot of land in the country and involve an expense out of all proportion to its advantages. Countless defective titles would be exposed, which time would ordinarily heal. In the United States compulsory registration is out of the question and voluntary registration has proved a failure.

Registration of deeds is the prevailing system of land transfer outside the region of compulsory registration of title on the one side and the British Empire on the other. There is, however,

infinite variation within this system. There may be a land register where the land is plotted and transfers noted according to the individual plot as carefully as where registration of title prevails. Such is the scheme in the Scandinavian countries and in Scotland. Registration may be necessary for the transfer of the title even as between the parties, as in the latter country. The typical system, however, is that of France, Italy and the United States, where the registration is not necessary for the transfer of title between the parties but is for the protection of subsequent purchasers, mortgagees and even unsecured creditors. It is quite common in such a case to have the instruments indexed alphabetically by the names of grantors and grantees without reference to the particular plot. The work of registration is here largely clerical and is relatively unimportant as compared with registration of title. Third parties are protected against secret transfers, but the record is by no means an all sufficient system in which, as under title registration, the result is neatly tabulated at the end.

Registration of deeds appeared originally as the supplement to transfer by deed. Transfer of land by the delivery of a charter dates back to the later Roman Empire. It was a common practise in the Frankish empire, in Italy and in the portion of France in which written law prevailed; with the decline of feudalism it was revived in much of the country of customary law in northern France. In England after the Statute of Uses it came to be the current method of transfer, although for two hundred years or more two deeds were required, the lease and the release. The disadvantage of transfer by deed was that it was secret; but despite many attempts to assure enrolment or registration England still adheres to the system of secret transfers except for mortgages not protected by the custody of title deeds, which by the Land Charges Act of 1925 must be registered.

Registration of deeds is the almost universal method of land transfer in the United States. The record of land transactions is very bulky and the official indexes are arranged alphabetically by name of grantor and grantee. This necessitates a prolonged search and does not show conveyances which may be on the record but are outside the chain of title. To prevent repetition of searches the abstract has been developed; it contains the pertinent facts on the record and if properly made has only to be brought up to date whenever a new transfer or mortgage is contemplated. With the abstract has come the ab-

stract book, an unofficial index of the records by lots or tracts, which greatly facilitates the search and catches the conveyances of record outside the chain of title. Unless some time limit is put on the abstract it becomes long and the examination to determine whether the title is merchantable is likely to be difficult and tedious. Because of the lack of certainty in titles there have developed title insurance companies which guarantee the holder for losses through defect of title. Such companies have made headway in many sections of the United States; their services are expensive, but this is mitigated by the fact that they make up for some, although by no means all, of the inadequacies of the familiar covenants of title and that they provide adequate financial responsibility.

It has been suggested that to avoid the expenses of taking title much of the work of the abstracter, the lawyer, the guaranty company or the title insurance company might be assumed by the government. There is no reason to believe, however, that this would be less expensive to the individual. Governmental action is likely to be both inefficient and expensive, and the policy of shifting the expense of a transfer of land from the individual to the public is of doubtful value. While the government might take over the abstract books and make the unofficial lot and tract indexes official, thus rendering duplicate books unnecessary, to assume the tasks of the title insurance companies would amount practically to registration of title.

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See: ALIENATION OF PROPERTY; POSSESSION; OWNERSHIP; SUCCESSION, LAW OF; LAND TENURE; MORTGAGE; FRAUDS, STATUTE OF; LIMITATION OF ACTIONS.

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LAND UTILIZATION. The principal uses of land are for crops, pasture or forest; mining or transportation facilities; recreational, residential, industrial or commercial activities. Frequently land is used for two or more purposes simultaneously; as, for example, woodland which is pastured. On the other hand, large areas of land sometimes lie waste. Recently there has been included within the meaning of the term land utilization the idea of land use planning; that is, the formulation and administration of land policies aimed at the employment of the land resources in the uses for which they are economically and socially best suited.

The most extensive use to which land in the United States is put is for pasture, the aggregate area devoted to pasturage, including woodland pasture, being not less than 1,000,000,000 acres, or more than 50 percent of the land of the nation. Fully half of this acreage consists of arid and semi-arid grazing land in the west. Forest and woodland, half of which is pastured, cover 500,000,000 acres; and in addition there are perhaps 100,000,000 acres of pinion juniper, oak brush and similar arid woodland types of vegetation in the western states. Crops, including crop failure, occupy about 375,000,000 acres, while over 40,000,000 acres of plowland lie idle or fallow. Roads and lanes cover probably 20,000,000 to 25,000,000 acres, and railroad rights of way 4,000,000 or 5,000,000 acres. Farmsteads, which are partly residential and partly agricultural and which sometimes are used for transportation and commercial or industrial purposes, occupy about 25,000,000 acres. Cities and villages include probably 12,000,000 acres. Finally, there are some 15,000,000 acres in national and state parks, cemeteries and golf courses. In mining regions the surface of the land is usually exploited for other purposes, and the area exclusively devoted to mines is therefore insignificant.

From the standpoint of value the order of importance is quite different. Urban land, including that used for residential, industrial and commercial purposes, has a value far greater than that used for all other functions; indeed the assessed valuation of land in New York City alone in 1929 was more than one fourth that of all the farm land of the nation. Because of this greater value per acre there is a hierarchy, so to speak, in land utilization. Commerce has first

choice of the land, taking as much as is needed from other types of enterprise. Usually industrial and transportation uses press in upon residential use, but sometimes residential land has too high a value to permit such developments. With the growth of cities, suburbs and subdivisions press out upon crop, pasture and forest lands, which sometimes lie waste temporarily. Similarly, as consumption of farm products increases, the use of land for crops tends to replace the use for pasture or forest, because crops usually produce commodities of much greater value per acre. If crop products, however, can be imported more cheaply than they can be grown, as in England, pasture land may increase at the expense of crop land. In the originally forested portion of the United States pasturage until recently expanded at the expense of forest. Although it is probable that some forest land can be made to produce in the course of time and after heavy investment products of a higher value per acre than would pasturage on the same land, in general forest use ranks lowest in the hierarchy. At present much forest and cut over land in the United States has no value and millions of acres are tax delinquent. Land used for recreational purposes may have a very high value per acre, as in city parks, or a very low value, as in the Canadian north woods.

This hierarchy of land uses varies primarily with consumption and production factors. Consumption factors include number of people, consumption per person (or the standard of living) and net exports. Shifts in the consumption of some commodities, as from horses to automobiles, may greatly change the consumption of other commodities, as of oats. Production factors are principally land resources, transportation facilities and stage of technique.

The increase of population has been the principal consumption factor causing the conversion of forest or pasture into crop land as well as the transformation of a small portion of each of these three land classes into residential, industrial, commercial and transportation areas. Aggregate consumption per capita of farm products has changed very little in the United States since 1900—less than 7 percent in either direction from the norm—and it is unlikely to change greatly in the future. Agricultural exports have been sinking yearly to new low levels and now require for their production less than 10 percent of the farm land. It appears almost certain therefore that the nation's population will continue to be the dominant consumption factor

influencing the use of land for crops and pasture and probably also for forest. Because of the greater elasticity of the consumption of manufactured goods other than food and of various services, population is likely to prove a less important factor in determining the utilization of land for residential, industrial and commercial purposes, although it will undoubtedly continue to exert a very important influence upon these uses also.

From 1920 to 1923 the population of the United States was increasing nearly 2,000,000 a year. Ten years later the increase was less than 1,000,000. This decline in population growth doubtless will be slower in the future, since immigration can decline no further. A further falling off in births as great as that between 1925 and 1930 will, however, result in a stationary population soon after 1950, to be followed by a declining population, unless restrictions on immigration are relaxed. The approach to a stationary population will probably be accompanied by a slowing up of expansion in the urban uses of land, particularly for industrial and commercial purposes, and may be associated with great shifts in the utilization of land for residential purposes. As for agricultural expansion, and considering the nation as a whole, it stopped more than a decade ago. In 1931 the total crop acreage was smaller than in any year since 1917, with the possible exception of 1924.

Although the population of the United States would have been greater by 5,000,000 in 1932 if the rate of increase of 1920-23 had continued and these 5,000,000 persons would have required about 13,000,000 acres of crop land, the principal factor in causing a stationary crop acreage has been progress in agricultural technique. The fact that food and fibers have been produced for a population larger by 22,000,000 in 1932 than it was in 1917 without a net increase in crop or pasture area or a decrease in per capita consumption of farm products is due largely to two significant factors. First, the increase in automobiles and tractors and the consequent substitution of gasoline for horse feed have released for meat and milk animals the products of fully 30,000,000 acres of crop land. Second, improvements in animal husbandry have brought about greater production of meat and milk per unit of feed consumed, resulting in turn in an economy of apparently 25,000,000 acres of crop land. Other contributing causes have been the shifts from less productive to more productive crops per acre, principally from corn to cotton in the

south (prior to 1931) and from wheat to corn in the western corn belt, and shifts from the less efficient classes of farm animals per unit of feed consumed to the more efficient, principally from beef cattle and sheep to dairy cattle and swine. There has been practically no increase in acre yields of the crops as a whole for thirty years.

The stationary acreage and acre yields of the crops in the United States have been accompanied by a westward shift in crop area. An increase of 33,000,000 acres of harvested crops took place between 1919 and 1929 in a third of the counties of the nation, located for the most part in the great plains region, where the mechanization of grain production and the introduction of drought resistant and shorter season varieties of crops made it possible to produce grain at a profit on land which formerly could be used only for pasture. Simultaneously a decrease of 32,000,000 acres of harvested crops occurred in nearly two thirds of the counties of the nation, located mostly in the east and south. In these originally forested lands the soils are in general less fertile (but receive more rainfall) than those of the grasslands of the west, while the farms are smaller and less adapted to the use of modern machinery. Moreover some of these farms are hilly, while others have suffered from soil erosion or other forms of depleted fertility. It is estimated by the United States Bureau of Chemistry and Soils that 17,500,000 acres of former crop land have been rendered non-tillable by erosion, and probably 100,000,000 acres or more have had much of the surface soil removed.

Seldom in the history of the United States has the future of agriculture been so uncertain as it is at present. Of the factors determining the utilization of land the trends of population and of per capita consumption appear the most dependable. Unless the restrictions on immigration are relaxed or a reversal of direction occurs in the trend of the birth rate, there will be but between 5,000,000 and 10,000,000 more people to be fed and clothed a decade hence. In view of the experience of the past thirty years it is probable moreover that each person will consume about the same aggregate amount of food and fibers ten years from now as today. Likewise the prospect for any great increase in the export of farm products is not encouraging.

It is true that soil resources are being depleted and that this depletion involves the eventual extinction of agriculture in many localities. Nevertheless, the resources of the nation are so

great that it is very unlikely that the trend of agricultural production for the nation as a whole will be affected for several decades at least. There still remain about 600,000,000 acres of land available for crops, of which nearly 300,000,000 acres need only plowing and planting to make them at once productive. Prior to 1930 it appeared that progress in agricultural technique was perhaps the most certain of all factors. Mechanization had been applied principally to the production of the small grain and hay crops. Most of the corn and practically all the cotton and fruit crops are still harvested by hand, as indeed they were a century ago. The mechanization of farm operations in connection with these crops, which require probably half of the labor on all crops, seemed likely to continue the trend toward the utilization of more level lands for crop production and the reversion of hilly, rough or stony lands to pasture or forest. Developments since the economic depression of 1930, however, have cast some doubt on this assumption of the continued rapid progress in mechanization. The small, more or less self-sufficient farmers have endured the depression better than the large commercial farmers. Mechanization is at a standstill, and many farmers who have horses are using these instead of their tractors because they have the feed and do not have the money to buy gasoline. It is possible that location with reference to roads, power lines and social services may become as important a factor as topography in determining the utilization of land for farming.

With the construction of good roads and the increasing use of the automobile and motor bus in the period following the World War a notable increase occurred in the number of semisuburban homes located along the highways near cities. Factory workers and business and professional men found it possible to cultivate a garden and keep chickens and even a cow and by putting in a few hours' work morning and evening materially to reduce their living costs. If such places produced \$250 worth of products they met the census definition of a farm. Between 1920 and 1930 the number of farms under 3 acres, many of which were part time farms, increased 111 percent; those occupying 3 to 9 acres, nearly 18 percent; and those of 10 to 19 acres, 10 percent. On the other hand, all the farm groups between 20 acres and 500 acres decreased in number. This part time farming movement will doubtless continue with further improvements in transportation facilities, and it

would be accelerated by the general adoption of a shorter working day. It seems likely to result in a greater demand for land near the cities and in industrial districts. Besides affording profitable and healthful employment of surplus time such garden homes can provide a considerable proportion of the family living during periods of unemployment. These little farms are especially attractive to persons who have retired from active work; the number of old people is increasing and will continue to increase rapidly for several decades.

Since the depression a new kind of back-to-the-land migration has set in, which may not prove to be insignificant locally with reference to land utilization. Thousands of urban unemployed have gone back to relatives or friends on farms, seeking shelter and sustenance. Some of these have farm experience, others have not; and almost none has the capital to engage in commercial farming. They are not needed to produce food and fibers, for a surplus of both exists. Nevertheless, it is likely that many will remain on the land, supplementing their incomes by doing odd jobs or perhaps finding regular employment in nearby cities or villages.

If, as is likely, there should be a recovery in commercial agriculture, the post-war trend toward more small and more large farms with fewer medium sized farms will be accelerated. This will mean more intensive utilization, in terms of labor, of the land located more favorably with reference to good roads and opportunity for non-agricultural employment and, in terms of capital, the more intensive utilization of the level and more fertile land remote from the cities. The less fertile or less level areas remote from good roads or cities will thus become less valuable and unless they afford peculiar advantages for recreational use will revert to forest or pasture or merely lie waste.

It is becoming clear that there is much submarginal forest land as well as agricultural land. Millions of acres of forest and cut over land are tax delinquent and in process of reversion to public ownership. Consumption of forest products has declined, and there is little prospect that private owners can recover the interest and taxes involved in carrying the poorer grades of land until a new crop of timber is produced. Fortunately low grade forest land, particularly forest land in public ownership, has other uses than production of wood. Forests protect watersheds, for they prevent land from eroding and lessen the severity of floods and the silting of rivers.

In the west forests regulate the flow of streams for irrigation and power purposes, while in the east they are utilized to provide a pure water supply for many cities and as aids in the equalization of the flow of rivers used for power. Forests also preserve wild life and provide recreation and aesthetic enjoyment. The trend is toward the use of the poorer grades of forest land for these purposes rather than for wood production. Michigan has set aside over 600,000 acres of tax delinquent land as state forests, and New York has adopted a constitutional amendment involving an appropriation of \$19,000,000 to be expended over eleven years for the purchase of submarginal farm and forest land and the development of state forests and parks. The better grades of forest land either because of fertility or location, like the better qualities of crop land, seem likely to be used more intensively; while little more may be done with poor or remote forest land than to protect it from fire and in places develop recreational facilities. Farm wood lots generally belong to the better grades of forest land from the standpoint of fertility as well as location and constitute nearly one third of the forest land of the nation. Because they are of special value to the farmer, providing as they do products which he would otherwise need to purchase at retail prices, the improvement of their management is one of the greatest problems in forest policy.

Most studies of land utilization made thus far have been of small problem areas (counties or townships). Such studies involve a description of the use of the land, including trends in utilization, and a classification of the land based on the physical and economic conditions influencing its use. Data on tenure and area of the farm and non-farm land are collected. The productivity of the several classes of land when used for crops, for pasture and for forest is studied; and yields, values and costs of the agricultural commodities are compared. This leads to a consideration of the combination of the several farm enterprises into systems of farming on the various classes of land and the standard of living that could be maintained. Land utilization surveys also devote attention to the probable influence of changes in the use of the land on the distribution of institutions, on social relationships and on taxation and public expenditures in the area. In turn attention is given to the influence of social and economic conditions, particularly taxation, upon the use of the land. Occasionally the outlook for change in prices of

farm products and in costs of production is given consideration; but as this involves studies of the factors affecting the trends of production and consumption not only in the region and nation but also in other parts of the world, such consideration of the outlook is often perfunctory. In addition, the relation of land use in the region or district to that in adjacent regions and indeed in the nation as a whole should be worked out but is seldom treated.

It is evident therefore that land utilization research has not only economic but also geographic and demographic aspects. The geographic aspect consists largely of a survey of the temperature, moisture, topography and soil conditions which influence the utilization of land for crops, pasture or forest. The demographic aspect involves studies of population distribution, composition, characteristics and trends not only in the area being surveyed but also in the nation and even in those nations to which agricultural products are exported. The information that may be needed in determining the best use of the land is normally of extraordinary breadth, and because of this fact as well as of the newness of the subject there are wide differences in the character of the information contained in the various local land utilization surveys.

With the prospect of great increase in population or in the export of farm products no longer in sight and with the assurance that progress in technique can continue, probably at an accelerating rate, if economic conditions permit, it is obvious that the former national and state policies of land utilization have become obsolete if not injurious. It is also apparent that new problems have arisen and that their solution is of basic importance not only to agriculture but also to the nation as a whole. Realizing this need the secretary of agriculture joined with the Association of Land-Grant Colleges and Universities in calling a conference on land utilization in November, 1931. Out of this conference there have developed two continuing committees, a National Land Use Planning Committee, whose function is primarily research, and a National Advisory and Legislative Committee on Land Use. The committee for land use planning has appointed eleven research committees to deal with the major phases of the subject: adjustment in submarginal areas; adjustment and reorganization in better farming areas; land inventories and land classification; agricultural outlook; forests, parks, recreation and wild life preservation areas; agricultural credit; adjustment and reor-

ganization of taxation in relation to land use; public range policy; reclamation, drainage and irrigation policies; control and direction of land settlement; land values.

Since the whole subject of land utilization is still in its formative stages, it is a little difficult to indicate with any degree of exactness the elements which should enter into a land policy in keeping with the changed demographic, social and economic conditions of the country. The following is a summary of the important recommendations adopted by the National Conference on Land Utilization in 1931. These mark out the paths which it now seems a national program should follow. First, the remaining public domain should be organized into public ranges to be administered by a federal agency and in coordination with the national forests. Second, lands in the Rocky Mountain and Pacific coastal regions that are valuable for watershed protection should be administered by the federal government. Third, a national inventory should be made of the nation's land resources and soils be classified on the basis of their agricultural value. Fourth, land development and settlement enterprises should be licensed and regulated. Fifth, the Reclamation Service should confine its efforts to finishing projects already started; new reclamation projects through either irrigation or drainage should not be undertaken until they are justified by the agricultural needs of the nation. Sixth, steps should be taken to outline and initiate a program of soil conservation whereby damage from erosion, leaching, increasing acidity, destruction of organic matter, deterioration of soil structure, overgrazing, flooding and alkali accumulation may be reduced to a minimum. Seventh, the completion of the soil survey should be hastened. Eighth, increased study should be given to all the factors determining the type of agricultural use best suited to each specific kind of land. Ninth, the federal and state agencies should develop a coordinate program of land utilization for the extensive areas of idle or misused lands. Tenth, the objectives in federal and state land acquisition through purchase should be materially amplified. The conference called upon the federal and state governments to coordinate "in defining the principles, scope, and methods of public land acquisition and administration, and in determining what lands should soon or ultimately be acquired and by what agencies."

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See: NATURAL RESOURCES; PUBLIC DOMAIN; LAND

SETTLEMENT; RECLAMATION; IRRIGATION; HOME-STEAD; GRAINS; AGRICULTURE; POPULATION; CONSERVATION; LAND TENURE; LAND SPECULATION; REAL ESTATE; FORESTS; BACK-TO-THE-LAND MOVEMENTS.

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LAND VALUATION involves the process of determining the value of land, usually in terms of money. While it is a phase of valuation in general (see VALUATION), it derives its distinctive features from the peculiar characteristics of land as an economic good. Land differs from freely reproducible goods in its greater durability, negligible rate of physical depreciation, relative immobility and lack of homogeneity. From the greater durability of land and its consequent inflexibility in economic relations arises the peculiar emphasis in land valuation upon the future earning capacity of land. Because of the lack of standardization among the different units of land, the relative infrequency of sales and the disorganized, local character of the real estate market individual judgment plays a greater role in the valuation of land than in that of standardized goods in a better organized market. Land valuation like valuation in general involves in practise two closely associated processes, the technical appraisal of the various factors affecting the worth of the land, and the more general final judgment of value.

In valuation a distinction is usually drawn between two general classes of land. Residential sites or park areas, for example, are consumption goods, and the principles of valuation differ from those applicable to land as a production good. In some instances, as in the case of a farm, the two classes of land merge, although the valuation elements should be kept separate. The process of appraising the value of a particular piece of land as a production good may conveniently be divided into three steps. The first is capitalization of the income yielded or expected from the services of land in production. Land is expected, although often mistakenly, to yield an income for an indefinite number of years; and the purchaser of the land, who is buying the right to receive a series of annual incomes, often considers the past income as a guide to what the future income will be. Studies show that the in-

come received from land for seven to ten years preceding sale is a most effective gauge of the price the purchaser will agree to pay. But since future incomes are uncertain they are ordinarily discounted at a current rate of interest; anticipated incomes forty or fifty years hence have, however, practically no influence upon present values. The commonly accepted formula for capitalizing the series of expected incomes into a sum representing the present value of the land is

$$V = \frac{a}{r}, \text{ where } V \text{ is the value of the land, } a \text{ the}$$

annual income, and r the rate of interest. The value so found may be termed "productive value."

This formula, however, assumes a constant income from the land, whereas in fact the income may be expected to rise or drop. Consequently there may enter an element of "anticipated" value. The formula altered for this expectation

$$\text{will then read } V = \frac{a}{r} + (\text{or } -) \frac{i}{r} 2, i \text{ being the}$$

amount of expected annual increase or decrease. This formula is by no means exact or complete. At best it can be used only as a rough guide, for incomes from land ordinarily will not increase or decrease at a uniform rate. There may be increases in some years and decreases in others, and the formula would have to be altered to fit these refinements. Moreover the net income from land is difficult to ascertain because costs cannot be defined clearly. How much should be attributed to management and how much is the labor of the family worth? Where the fertility of the soil is built up, is that a cost or is it part of the permanent improvement of the farm? A \$100 difference in the estimated income will make a difference of \$2000 in the value, if income is capitalized at 5 percent; and even the interest rate may change materially. A forecast of future costs and incomes therefore necessarily involves considerable guesswork.

In European countries where population movements and land uses have been relatively stable, this speculative element plays a very small role. In England the value of land is expressed in terms of twenty or twenty-five years' purchase of the annual rent, the number of years depending upon the other elements besides productivity which enter into the calculation. In pre-war Germany the value of land was estimated to be approximately twenty-eight times the annual rent. In the United States, however, no such close relationship between rent and value exists. Studies made by the United States De-

partment of Agriculture indicate wide variations between cash rents and average values. Until 1920 land values were generally rising; since then they have been declining irregularly. Hence the *i* in the formula played a leading role.

Once the present "productive" value and any "anticipated" values have been ascertained, a second step is the addition to or subtraction from this "economic" value of the worth of such intangibles as the amenities of the site, the character of the community and the quality of home the land provides. The number of these psychological elements of value is legion and it is not easy to mold them into a precise formula. How precisely can we estimate in dollars and cents the worth of the prestige attaching to landownership, or the feeling that land is permanent, fixed and tangible and hence a sort of "savings bank"? Yet these are very real elements in the valuation of land. Finally, valuation will be affected by factors which produce a certain level of prices in the community. The land market is ordinarily rather narrow and local and the level of values in this local market is sensitive to such factors as the nationality of the inhabitants, their customs and standard of living, their racial origins and religious affiliations. Sometimes too the level of values in a land market will be profoundly affected by a considerable number of foreclosures and distress sales, as in the case of farms in periods of agricultural depression.

The growing complexity of modern economic life has widened considerably the range of purposes for which land valuation is undertaken. The most common purpose is the sale and purchase of land. The value ordinarily sought is "cash market value" under competitive conditions with "willing seller and buyer." For certain purposes, however, other values may be desired. Thus when land belonging to public utilities is assessed for rate making, the value of the land to the utility rather than the market value may be sought. Other occasions requiring valuation proceedings or appraisals are: purchase and sale of land for public use, leasing of property, issue of securities and consolidations, loans on real estate, division of estate, business inventories and assessments for taxation. While the purpose of an appraisal may affect its results, the price for which land can be sold may be taken as the usual bench mark, from which corrections may be made for special considerations.

The process of appraising generally involves the examination and weighting of the physical, economic, legal or other factors which influence

the value of land. Among the physical factors in farm land appraising are: type and chemical content of the soil, variety of crops to which the soil is adapted, number of acres under cultivation, size and condition of fields, amount of woodland, topography, water resources, rainfall and drainage and length of growing season. Of the economic factors proximity to market in terms of time and cost is obviously important, as is also accessibility to schools and churches. The question as to whether a farm is of the right size for the type of agriculture and scale of operations is frequently overlooked. The burden of taxes, special assessments, drainage and irrigation charges is vital. If the farm has been irrigated or drained, the encumbrance of debt may be so large that profitable farming is virtually impossible. The adequacy, condition and modernity of the buildings or other improvements on the land are further significant factors in an appraisal. Moreover if the title to the land is not clear or is subject to liens, the value is necessarily affected.

In appraising urban land a distinction between business and residential property is fundamental. In residential sites the so-called amenities—view, spaciousness, eminence, light, freedom from noise, architectural style and symmetry—are prime considerations. Location also is important, but proximity to schools, churches and shopping centers is distinctly more significant than nearness to traffic. Indeed distance from a busy street with a heavy flow of traffic is more of an asset than a liability. Zoning and deed restrictions in certain sections tend to have a stabilizing influence on values. The cost of getting utility services to the site is a very appreciable item affecting particularly newly subdivided land on the outskirts of a city.

Business sites, particularly for retailing, derive their value chiefly from location with respect to pedestrian traffic and from the buying power of those pedestrians. For this reason the amount of frontage is important. Of two lots equal in area the one with greater front footage would ordinarily be more valuable, while corner locations command a premium. In all cases the value tends to be enhanced if the amount of land available is the proper size for the desired development. For instance, the cost of assembling separately owned small parcels for large office building sites is an appreciable item. The weighting of the various factors in an appraisal of a business site often varies according to the type of business. For factory sites nearness to transportation facilities, accessibility and cost of

power and availability of water supplies are in many instances prominent factors influencing the differential values of lots within a city. In both urban and farm lands the process of valuation is obviously simplified in case of a very active land market, where the actual sales prices of comparable units of land in the locality form the basis for imputing a value to the land under appraisal.

Appraisal of forest and mineral lands is a specialty. Forest land appraisals are predominantly influenced by the fact that trees require from thirty to one hundred and fifty years to mature. Thus the income has to take care of costs accumulated over many years. During the growth period incidental income may be derived from the leasing of grazing rights or gaming privileges. The land once cleared of trees, according to prevailing practise, is available for resale for other uses. In the United States the once vast amount of virgin timber led to a consideration of forest land like mineral land as a resource to be exploited. Very recently a few states have begun to adjust their tax and land use policies to the treatment of forests as a crop. The effect these changes may have on American appraisal technique is still uncertain.

In mineral lands there is nothing comparable to a recurring crop; the amount mined is so much taken from the future supply, and valuation must meet the problem of balancing future needs and present requirements and evaluating the factor of depletion. Since subsurface minerals are hidden and their exact position and amount are not definitely known, speculation plays an important part in the appraisal of mineral lands. The task is still further complicated by international politics, tariffs, national defense policies, royalty laws and practises, corporate mergers and the competitive struggle for mineral reserves. At present mineral experts look to a lengthy period of relatively low prices for mineral land, because most of these industries have geared their operations to an expected rate of growth in population and demand which is unlikely to be experienced.

Notwithstanding the growing complexity of economic life and the multiplication of influences upon land values many appraisers have sought to simplify, standardize and give a semblance of mathematical accuracy to their value estimates by developing appraising formulae. There are formulae for urban land giving weights to corner influence, depth, frontage and the like; and in agricultural land soil, climate, topography, pro-

ductivity and location are sometimes given definite weights. Appraising by standard rules or formulae is not yet generally substantiated or accepted. To be sure, human judgment is improved by orderly classification of land uses and of the factors affecting market valuations, but despite some opinions to the contrary it is not believed that the intricate process of determining prices of an unstandardized, inflexible commodity in a disorganized local market can ever be reduced to rule of thumb formulae. Widespread defaults on mortgages and failures of banks in recent years attest the need not only for better methods of appraising but also for appraisers with high professional standards.

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See: VALUATION; RENT; LAND SPECULATION; APPRECIATION; REAL ESTATE; LAND MORTGAGE CREDIT; LAND TAXATION; ASSESSMENT OF TAXES; EMINENT DOMAIN; RATE REGULATION.

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LANDAUER, GUSTAV (1870-1919), German anarchist. Landauer was born in Karlsruhe of Jewish parentage. Poet, philosopher and politi-

cian, he emphasized the cultural and moral values of revolution. He wrote novels, tales and many philosophical and literary essays and translated the works of Oscar Wilde, Bernard Shaw and other authors. From early youth he was an adherent of socialism, on the ethical aspects of which he laid particular stress, but he rejected official Marxism and sharply attacked German Social Democracy. He considered the chief task of labor to be the abolition of the state and its replacement by small communes, producers' associations and co-operatives. In his final aim Landauer was in agreement with Marx, who also demanded abolition of the state in favor of a classless society; but he unconditionally rejected the use of political action in the workers' revolutionary struggle, which Marx and his disciples recommended. He therefore confined his activities to working men's cultural and literary organizations. His model in many respects was the great French anarchist Proudhon. His hostility to the state led necessarily to sharp opposition to militarism and every form of force. Landauer early pointed out that the nations of Europe were menaced by a colossal war, and he considered it his special task to enlighten the workers concerning this peril. He did not believe that the socialist International could prevent it, and he urged the workers in that event to oppose the war plans of the government by means of the general strike. During the World War Landauer definitely opposed the policy of the German government. After the revolution in 1918 he issued a program for a republic of communes and cooperatives and went to Munich, where he sought to cooperate with Kurt Eisner, the president of the Bavarian republic. When in April, 1919, the Soviet republic was proclaimed in Munich, Landauer was active in it for a short while but broke with the Communists over their policy of force. He was murdered by soldiers of the victorious governmental troops when they captured Munich and overthrew the Soviet republic.

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Important works: *Skepsis und Mystik* (Berlin 1903); *Die Revolution* (Frankfort 1907); *Aufruf zum Sozialismus* (Berlin 1911; 4th ed. Cologne 1923); *Shakespeare, dargestellt in Vorträgen*, 2 vols. (Frankfort 1920); *Beginnen; Aufsätze über Sozialismus* (Cologne 1924). See also *Gustav Landauer, sein Lebensgang in Briefen*, ed. by Martin Buber and Ina Britschgi-Schimmer, 2 vols. (Frankfort 1929).

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LANDED ESTATES. As a distinctive form of large private fortune landed estates have played an important role in economic and social history. Even where the ownership of landed estates is combined with entrepreneurial activity in agriculture, as is true in most cases, and thus represents more than the mere appropriation of that peculiar species of income, rent, land affords a particularly lasting basis for economic monopoly and the exercise of social power. The more popular formulations of the Ricardian theory of rent from Henry George to Franz Oppenheimer have always tended to ascribe social inequality and exploitation, and sometimes even political domination in general, mainly to the extensive appropriation or monopoly of land in contradistinction to other forms of private property.

A more objective analysis reveals that landed property has commonly been—not only under the mediaeval feudal system—at the border line between what jurists distinguish as public and private; the landed estate represented a combination of private property with political power and has been used as a device for political and administrative decentralization. Such combination cannot be fully explained by reference to lack of differentiation under primitive conditions. The phenomenon reappears in the modern period in the exercise of exceptional administrative powers by British colonial companies in Africa and in the sweeping monopolistic powers enjoyed for a time by transcontinental railroads in the United States. In both cases power has been associated with the ownership of large tracts of land which tended to broaden out into territorial and political domination.

The controversy as to whether the first appropriation of land was collective (tribal or communal) or individual (patriarchal or seigniorial) reflects the difficulty and perhaps the impossibility of distinguishing between the public and private aspects of land domination. The right of eminent domain, claimed alike by tribal chieftains, oriental despots and feudal kings, is a "public" right which limits the prerogatives associated with even the largest and most powerful landed properties and fiefs. On the other hand, all "private" landed possessions of considerable size, for example, the *Grundherrschaften*, *seigneuries* and manors of mediaeval Germany, France and England, tend to become public administrative units either by utilizing older political powers or by acquiring new ones in the form of "immunities." It is not without significance in this connection that English com-

mon law has given to landed property the name estate, which in another form has come to designate the modern concept of political government.

Historical civilizations have produced several different types of landed estates. One type is characterized by the prominence of the larger landed proprietor who possesses offensive and defensive arms and particularly the more advanced military technique. The best illustration of this type of proprietor is the mounted warrior in Greece (*hippeus*), Rome (*equus*) and the Middle Ages (knight, *chevalier*), who is clearly differentiated from other classes and exercises an increasing control over smaller landed proprietors and peasants. The basis of another type is the credit dependence of smaller landholders on larger or of landholders generally on the commercial capitalists of the towns; this type is frequently connected with the first, or political, type but as often assumes a purely economic character. In all earlier civilizations the credit legislation and social revolutions aiming at the cancellation of debts illustrate the importance of credit, both in building up landed estates and in changing their ownership.

Under governments ruling a large territory, such as the kingdom of the pharaohs or the provincial administrative units of the Roman Republic and Empire, the estates of both secular magnates and religious institutions act alternately as rivals and allies of the state authority and the state domains. Where a substantial and articulate peasantry is present, the two chief tasks of the government—tax collection and cultivation of the state lands—can be solved by cooperation between the central authority and the peasantry, accompanied as a rule by considerable hostility toward the large private estates. When economic or political decline weakens the system of peasant farming, governments are compelled to have recourse to the large estates to assure collection of the land tax and cultivation of the soil. The history of land policy from the *ager publicus* and private latifundia of ancient Rome to the settlement of government lands in the United States and the British colonies shows clearly an alternation in the emphasis placed on landed estates or small holdings as the more likely means of solving the problem of land taxation and land exploitation.

There are many variations in the functional activities of the proprietors of landed estates. Proprietorship may be limited to the mere receipt of rents, either because the estate is of great size with many middlemen as agents or

farmers or as a result of one or more of the circumstances producing landlord absenteeism, such as military and administrative tasks incompatible with direct supervision of farming; strained relations with a peasantry of different race and culture, as in Ireland, Lithuania, Hungary, Galicia and Rumania; or the cultural attraction of life in cities or in foreign countries, as in the case of Russia and Poland. Yet, contrary to common opinion, pure absenteeism has been and probably still is something of an exception. The English and French landlords who succeeded the manorial lord and the *seigneur*, whether they let their lands to tenant or gentleman farmers, seldom represented the simple rent receivers envisaged by Ricardian theory. In England landlords always made farming contracts not only as owners but as capitalistic entrepreneurs responsible for certain major improvements of the soil. While in western Germany, Bavaria and Alpine Austria *Grundherrschaft* became indeed a conglomeration of seigniorial rights with the soil predominantly in the hands of old and often well to do peasant farmers and proprietors, in the east, particularly beyond the Elbe, the *Rittergut* of the *Junker* gentry, which developed out of the *Gutsherrschaft*, solved for the first time the problem of large scale proprietor cultivation by a revival of the feudal system of peasant labor services (the German *Fronen* and Slavic *raboty*), which in the older western countries dwindled to insignificance after the fifteenth century (as in the case of the French *corvée*).

In France and western Germany the so-called emancipation of the peasantry aimed primarily at the commutation of seigniorial rights together with abolition of most of the common fields and common pasturage systems. In the east, however, emancipation resulted either, as in Germany, in the transformation of estates worked by feudal labor services into "home farms" (*Restgüter*) worked with wage labor recruited largely from members of the old peasant class, who in the course of emancipation were compelled to yield from a third to half of their holdings and were further weakened by indemnity payments for the land they retained; or, as was mainly the case in Russia after the abolition of serfdom, in the transformation of the estates into smaller "home farms" or into holdings of tenants who formerly had been the serfs of their landlords. In both cases cultivation by large proprietors was left in a precarious position. Where freedom of migration existed, estates

gradually lost their wage laborers, who emigrated to the industrial west or overseas. Where emancipation stopped halfway, as in Russia, where the village community was preserved, or in the Danubian and Balkan countries, emigration was accompanied by general agrarian unrest, which led to the "cry for land" and the consequent participation of the peasantry in the revolutions of 1917 to 1920—an experience repeated in the more recent Spanish Revolution.

These revolutions have been called not incorrectly the final act of agrarian reform and peasant emancipation in Europe; they aimed directly at expropriation, with more or less nominal indemnity, and division of the landed estates. In Russia the satisfaction of the peasants' land hunger was merely the transition to collective agriculture in state or cooperative farms. But in the rest of eastern Europe, including the Baltic states, the succession states of the former Austro-Hungarian monarchy and the other Balkan states, the break up of landed estates did not produce an economically efficient and socially stable peasant agriculture. This is of course partly due to the obvious difficulties of educating a peasantry depressed by centuries of social servitude and inferiority in the tasks of independent production and marketing, especially during an increasing and increasingly universal agricultural crisis. To a large extent, however, the slow and doubtful success of agrarian reform in eastern Europe may be ascribed to the indispensability under present conditions of some of the economic and social functions of landed estates. In many instances the estates have been not only important cultural factors, but also the necessary models of extensive grain production for large export markets as well as of forest cultivation. Not only in agriculture but also in mining and metallurgy the landed aristocracy, as in the case of the Upper Silesian magnates, played an important economic role as promoters. This helped to assimilate the large landowner to the industrial and commercial bourgeoisie, which in turn acquired landed estates of its own; in England, for instance, leading bourgeois families entered the ranks of the landed gentry and even nobility by the purchase of estates or by marriage.

The decline of the landed estate in Europe has been accompanied by the shift of grain farming to the great overseas countries as a result of the natural precedence given by peasant agriculture to cattle, dairy, poultry, vegetable and fruit farming. The transformation of the class structure of modern society entailed by this

decline would seem to lead logically to the abolition of the privileged rights of undivided inheritance of landed estates, particularly the continental European fideicommissa, sanctioned by modern governments in place of the succession laws of the Middle Ages; but the preservation although in modified form of entail in England and the tendency in various countries to preserve and reenforce undivided inheritance of substantial peasant farms seem to prove that land as a factor of production retains features antagonistic to the individualistic concept of property. While in the agrarian countries landed estates disappear as the result of direct attack by reforming governments, in the more developed capitalistic countries the modern systems of income, property and inheritance taxation effect the same result indirectly; for the incidence of taxation is especially burdensome on landed estates as compared with other forms of enterprise because of the marketing and credit difficulties besetting agriculture at present. Modern governments, however, may yet be forced to assist in the solution of these problems even for the benefit of large scale farms, especially since heavy taxation does not necessarily break up estates; in England, for example, there has been a tendency for overburdened estates, instead of being divided, merely to pass from older landed families to new proprietors of superior wealth or capacity.

On the whole the great question at present seems to be whether landed estates will be succeeded by farms of small size ranging from capitalistic to peasant family holdings or whether this liberal system of competition and private property will give way to large scale or collective farms after the Russian or some other model. The latter development would indeed be a belated justification of some of the economic functions of landed estates. In fact the problem of the correct size of farms and of the proper system of farming will probably find a variety of solutions, depending upon geographical, economic and historical conditions. Should development be more or less uniform, the newer continents, particularly America, with their virgin soils and consequently less limited possibilities of agricultural exploitation might exert an altogether novel influence.

In the United States the landed estate of the colonial era was on the whole unable to secure the necessary labor force among the white colonists, except where half servile indentured labor was available or where, as in Dutch New York,

the democratic spirit was not very strong. The southern plantation imitating the English manor met the difficulty by importing Negro slave labor. Only a provisional settlement of agricultural relations followed the abolition of slavery in the south; remnants of the old servile farm labor persist, just as peonage still lingers in various forms and stages among the Indians in Mexico and South America. Nor has anything like a static equilibrium been attained in the Americas as between proprietor and tenant cultivation or with regard to the optimum size of agricultural holdings. The situation in the United States is greatly complicated by the recent accelerated growth of means of transportation for the rural population and of cultural intercourse with urban centers, which have to a large extent effaced the old distinction between the living conditions of town and country. Conditions in Russia, where experiments in collective agriculture are under way, are quite different from those in American countries, particularly in the United States. Yet even where the domination of the cultivators by great capitalist interests, such as railroad, water or development companies, is declining, it is likely that under favorable conditions of economic geography large farms even on the scale of latifundia will continue or will develop anew under corporate control; some features of the landed estate will thus be preserved in a political atmosphere which precludes agricultural enterprise by government itself.

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See: FORTUNES, PRIVATE; INHERITANCE; LAND TENURE; PRIMOGENITURE; ENTAIL; ARISTOCRACY; ABSENTEE OWNERSHIP; AGRICULTURE; LATIFUNDIA; COLONATE; MANORIAL SYSTEM; ENCLOSURES; PLANTATION; FARM TENANCY; PEASANTRY; AGRICULTURAL LABOR; AGRARIAN MOVEMENTS; SMALL HOLDINGS; LAND TAXATION; FARM MANAGEMENT.

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LANDLORD AND TENANT. The relationship of landlord and tenant, or, to use general terms less intimately associated with the common law system, lessor and lessee, has always loomed large in the law of property since the early days of civilization. Not only lands and dwellings but things and even immaterial rights have been leased. Although changing social and economic conditions have continually modified many of the fundamental terms and even the character of the lease as a form of legal transaction, the principal object to be achieved by its use has remained much the same. It has served as a means for transferring the use and benefit of property for a determinate period in order to secure a return in the form of rent.

It is extremely difficult, however, to mark the limits of a historical or comparative treatment of the lease as a form of legal transaction. The common law regarded the letting of a thing for hire as a bailment, while in many other systems such a transaction has been considered a lease of movable property. But even within one system it is often difficult to understand why a particular form of holding should be regarded as complete ownership while another is held to confer only a leasehold interest. The legal concept and the economic reality do not always coincide. Economically a perpetual lease is hardly to be distinguished from ownership. Moreover forms of holding which amount to less than complete ownership but which still rest upon some tenurial basis are not ordinarily regarded as leases. The modern conception of the lease is that it is primarily a form of bilateral contract which creates no relation of personal dependency.

Thus in the Roman law such forms of tenancy

as precarium and emphyteusis had many of the characteristics of a lease, although their exact juristic nature long remained in doubt. Precarium, which was of importance only in the early history of Rome, was the tenure on which clients cultivated the land of their patrons during the pleasure of the latter, paying no rent. Emphyteusis was a grant of land either in perpetuity or for a long term on condition of the payment of an annual sum (*canon*) to the owner or his successor. The origin of this form of tenancy is traceable to the long or perpetual leases granted by the Roman state to lands taken in war, *ager vectigalis*, the rent for which was termed *vectigal*. Ecclesiastical and municipal corporations created emphyteutic grants, as did individuals from the time of Constantine in order to be relieved of management problems. A constitution of Zeno determined that emphyteusis was neither sale nor hire but a special juristic transaction. Yet the tenant's rights were almost as complete as an owner's. He clearly had the right of use and enjoyment, the right to alienate the property by sale subject to the owner's right of preemption and the right to mortgage it and transmit it to his heirs, and he had to pay taxes. Throughout the length and breadth of the Roman Empire, the *agri limitroph*i were held by Roman veterans on the terms of an emphyteusis, and this double form of ownership became part of the current which ultimately led to feudalism in western Europe. Indeed the emphyteusis has thoroughly survived in some continental European and allied systems of law.

The bilateral contract of letting and hiring, the normal short term lease, of the Roman law was the *locatio conductio*. Like *emptio venditio* it had a double name because the obligations of the parties differed. The names indicate an earlier phase in which the contract was completed only by handing over the res, since *locare* and *conducere* both imply physical displacement. It may perhaps also be surmised that the earliest lease was probably of chattels. *Locatio* had three forms: *locatio rei*, the letting of physical property; *locatio operis*, the letting of a job; and *locatio operarum*, the letting of services; only the first is of present concern, however, although it should perhaps be observed that the Roman conception of a labor contract as a lease of labor is interesting. The term used to define the hirer of a house was *inquilinus*, and his rent was termed *pensio*; the hirer of a farm came to be termed *colonus*, and his rent *reditus*. It was probably the rule in late clas-

sical law that the rent had to be in money; this was certainly true under Justinian. *Locatio* created only a *jus in personam*, not a *jus in rem*.

In the Middle Ages in western Europe the Roman *locatio* seems to have been all but forgotten. While there were undoubtedly borrowings from the Roman forms of tenancy, these underwent such profound transformations as to become almost unrecognizable. The genius of the Germanic peoples seems to have expressed itself in the proliferation of a vast number of tenurial rights which differed from the Roman leasehold in that they were real rights. They were a necessary corollary of feudalism. The contractual lease for terms of years evolved only very slowly and not until the later Middle Ages. It was moreover largely an urban development.

Thus in England, where there existed freehold estates of an indefinite duration, estates for definite terms of years did not begin to be created to any large extent until the thirteenth century. Although terms of years are not mentioned in the Anglo-Saxon land books, it cannot be asserted that they did not exist before the Conquest. The nearest approach to a leasehold interest in the mediaeval law was the life estate, which would arise when land was limited to a person during his own life or during the life of another (*per autre vie*); and this form of estate played a large part in the strict settlements so common under English law down to the end of the nineteenth century. But although a life estate might terminate much sooner than the average term of years, the law regarded only the former as a freehold, probably because it was created among classes whose privileges were bound up with freehold tenure. The practise of creating terms of years was the result of the breakdown of villein tenure and the decay of the labor service system, and once started it spread rapidly, particularly in the sixteenth and seventeenth centuries in order to encourage the growth of agriculture. The term of years presented numerous advantages when compared with other forms of English holdings. Because the right of the tenant for years was regarded as purely contractual it was treated as personalty, not as realty, and thus had the incidents of personal property; that is, it was devisable, it was not subject to the various feudal incidents and it did not go to the heir on intestacy.

The English law distinguishes various leases of lands or dwellings by the duration of their terms. The term of years, which is the most

common form, ends automatically at a fixed date; and there is no limit to its length except that set by the Settled Land Acts on leases given by a tenant for life. Leases, however, for unspecified periods or for periods incapable of determination are void for uncertainty as leases in perpetuity. Tenancies from year to year are the practically universal form for agricultural lands and are either created by express agreement or arise by operation of law where a tenant at will or a tenant at sufferance pays a yearly rent. A term of years now includes terms for less than a year. A tenancy at will, which even under modern English law is equitable and not legal, exists, as its name implies, only at the will of the parties. While tenancies at will may be created by express limitation, most of them are implied under various situations. Because they were so uncertain English courts early showed a willingness to enlarge them into tenancies from year to year by indulging presumptions. A tenant at sufferance differs from a tenant at will in that his holding over after the termination of his term is wrongful.

Of the two most important modern civil codes, the French and the German, the former follows the Roman *locatio* very closely. It recognizes not only a lease of things but a lease of work. Among leases of things it distinguishes between *bail à loyer*, the letting to hire of houses, and *bail à ferme*, the letting to farm of rural properties. It also treats separately the *bail à cheptel*, the letting of a stock of cattle. Despite these distinctions the French lease is apparently like the Roman *locatio conductio* a unitary legal transaction. The German civil code has, however, departed from the Roman law in distinguishing two forms of lease, *Miete* and *Pacht*. The first confers only a bare right of users, the second also the right of taking the fruits and profits of the leased property. This usufructuary lease is naturally the form assumed by farm leases. Unless otherwise indicated, however, all the provisions of the code relating to *Miete* apply also to *Pacht*.

The lease as the most continuing type of legal transaction has been particularly subjected to a great many rules. The problems have been much the same in all legal systems, but the solutions have sometimes varied considerably. Only some of the more important rules will be examined here. The common law implied the terms of a lease only to a slight degree from the existence of the relationship of landlord and tenant. It left the parties to do their own con-

tracting. Despite the subsequent enactment of statutes it may still be said that English law contains fewer regulations than code systems. In both common and civil law systems, however, the legal provisions are not usually imperative. They apply only in default of special agreement. The result is that in legal practise the drawing of a lease becomes very elaborate.

The absolute requirement that a lease be in writing does not prevail in all legal systems. The Roman law apparently required no writing. An oral lease was valid at common law but the Statute of Frauds (which has been confirmed by subsequent legislation) declared void oral leases for longer periods than three years. Nevertheless, if there was a commencement of performance, the lease took effect at law as a lease from year to year and in equity for the actual term intended. An oral lease is valid under the French code but is under certain disadvantages: thus the landlord will be believed on his oath as to the rent. Under the German code a lease of land for a longer term than one year is required to be in writing, but it is also provided that if it is not it shall take effect as a lease for an indeterminate period. As a form of contract the lease is peculiar in that it often is renewed automatically by operation of law if the lessee holds over. In the Roman law a tacit *relocatio* for one year took place, and it is commonly allowed under modern continental codes for various periods and subject to certain conditions.

The adequate protection of the lessee's possession has been a comparatively late development in most legal systems. As a result of the fact, on the one hand, that the leasehold developed legally under the law of obligations, and, on the other, that economically it involved a relation of personal dependency the possession of the lessee has often been very precarious. In the Roman law the *conductor* had neither *dominium* nor *possessio* but only a right of detention. If the *locator* sold the leased property, thus conferring a *jus in rem* upon the purchaser, the *conductor* had merely a right to damages against the *locator*. To be sure, the death of neither *locator* nor *conductor* terminated the lease, a rule that is now accepted in most western legal systems; but the late classical law even allowed the *locator* to terminate the lease of a house if he needed it for his own use or even if it wanted repair. In English law it was not until the end of the fifteenth century that the possession of a lessee was protected not only

as against the lessor but also as against interfering third persons. The common lawyers could not conceive of a term of years partaking of the mystery of seisin, which might be defended by the great Assize of Novel Disseisin, and there is more than a suggestion that they made eager use of some scraps of Roman learning. Before the middle of the thirteenth century an action *quare ejecit infra terminum* had been given the lessee to prevent his being turned out by a purchaser from the lessor, but it was not until the invention of the writ of trespass that he was given protection against all other ejectors. Despite the special protection accorded to possession in Germanic law some Germanic systems recognized the rule "*Kauf bricht Miete*"—thus the Frisian-Saxon law and the old French law. The rule obtained a general common law validity in Germany as a result of the reception of the Roman law and was adopted in the modern Saxon and Austrian codes. On the other hand, it was rejected by the Prussian code and the *Code civil* and finally by the present German civil code. Whether the lessee now confers a "real" right under a particular continental code is often open to question. The common law view now is that a lease is a conveyance of an "estate" in the land. Apart from the formal legal theory a lease is perhaps something more than a mere contract. At least it is a specifically enforceable contract, enforceable against not only the contractor but also third parties.

The common and civil law systems differ most perhaps in their regulation of the respective obligations of lessor and lessee. The common law was exceptionally harsh upon the tenant, and although its rigors have been softened to a considerable extent by legislation, it is still less favorable to the tenant than either the Roman law or the present French and German civil codes.

Thus at common law there were implied only a very few obligations on the part of the landlord. There was not even an implied warranty of suitability or habitability, although this now exists in the case of houses. The tenant was liable not only for "permissive" waste, that is, allowing the property to deteriorate through acts of omission, but even for "ameliorative" waste, that is, changing the character of the land although its value was increased thereby. Thus the obligation of keeping the premises in repair was entirely on the tenant. Moreover he could not usually remove fixtures which in contemplation of law became attached to the real

property. The tenant was also under an obligation to pay taxes and charges and bore the risk of the accidental destruction of the premises. Among the few rights favorable to the tenant was the right to sublet. Agricultural tenants had the rights of estovers and emblements. The tenants' rights have been improved, however, either by judicial decision or legislation. Thus notice is required to terminate some tenancies; there is now a right to remove not only trade and agricultural but also ornamental fixtures; and agricultural tenants have a right to compensation for improvements. Under a recent act a tenant of business property whose lease is terminated has a right of compensation for goodwill.

The rights of a lessee in civil law countries may almost be described by saying that they are usually the precise opposites of those that prevailed under the common law. This more liberal tradition is in accord with the Roman law which put most of the burdens in *locatio conductio* on the *locator*, who had to keep the leased property in repair, pay taxes and other public charges and bear the risk of accidental destruction. There was even recognized the general principle that rent was in respect of enjoyment; and thus if climatic or other conditions had caused a failure of crops, the conductor could claim a rebate. The German civil code, which is almost a century later than the French, is not very much more liberal. The rights of agricultural tenants under both codes are more limited than those of urban tenants.

One of the great causes of friction between landlords and tenants has been the exercise of the right of distress by landlords, one of the few survivals of self-help in modern legal systems. The landlord, when the tenant is in arrears of rent, may enter the leased premises and seize the chattels found there. At common law all goods upon the premises were subject to distress, but this extensive power has now been cut down by exempting certain property from distress and by protecting goods belonging to an undertenant or lodger. At common law also the landlord could only impound the chattels, but he is now permitted to sell them. The landlord of course still has his action for the rent as well as a right of eviction. An equivalent for the right of distress for rent exists under the French and German civil codes. Both codes contain provisions for statutory pledge rights over the tenant's goods, rights deriving from the Roman law.

As far as forms of tenancies are concerned the

American law of landlord and tenant has copied that of England, except that life tenancies have in some states been modified by statute. But most American states have to a large extent modified the English rules in other respects. The principle of the English Statute of Frauds has been adopted in most states, in some as part of the common law; elsewhere the statute has been reframed so that a period of one year has been substituted for the English three during which parol leases are valid. The rule as to the effect of a tenant entering into possession is much the same as the English, except that there is very little authority as to the treatment of such a lease in equity. In the law of a number of states there is a limit as to the time for which certain leases, such as agricultural and mining leases, can be made. Maryland has provided by statute that except in the case of business leases it shall be impossible to grant a lease for longer than fifteen years, unless the tenant can redeem it at a certain price. In certain sections of the country, particularly in Ohio and Illinois, long term leases have been developed as a device for the holding and financing of business property. With respect to automatic renewal of a lease the American doctrine is that the landlord can at his option either hold the tenant for another year or sue him for use and occupation. The law of waste in the United States is more indulgent to the tenant than in England, particularly with regard to long term leases. In the law of eviction American courts have carried to great extremes a doctrine of "constructive eviction" which was first developed in New York state. Thus if the landlord or someone for whom he is responsible commits some act which does not amount to physical eviction but does interfere with the beneficial enjoyment of the premises, the tenant may vacate them within a reasonable time and is released from liability under the lease. Many statutes in the United States allow a tenant to terminate his lease when the premises are destroyed without his fault. The right of distress has also been abolished by statute in some states. In others it has been abrogated by judicial decision. In still others it has been superseded by the process of attachment on mesne process.

The lease is a form of legal transaction that is particularly useful in certain phases of free capitalistic development, in which it is an important factor in increasing production. Under these circumstances the tenant may even be in a position that is socially and economically superior

to that of the landlord. Ordinarily, however, the opposite is the case. The relation of landlord and tenant then becomes a major cause of social friction and at times has stimulated movements of protest and rebellion. The law may favor the tenant in the absence of express agreement; but since a lease is primarily the result of bargaining between landlord and tenant, the former of whom has always been in a much stronger bargaining position, the result has generally been unfavorable to the latter. The tendency of leases in a given community to assume a standardized form determined by custom has reenforced the landlord's position. Since the law did not undertake to limit rentals, the tenant was economically in the landlord's power.

The increase of pressure of population on land and building in large cities has given rise in recent decades to new social and economic problems. During the World War, when construction activities for dwelling purposes came to a sudden halt in all belligerent countries, these problems came to the fore. Under the wartime system of economy and government it was fairly simple as well as politically essential for warring governments to resort to legislative or administrative means to limit landlords' freedom in dictating terms of dwelling leases and to relieve the distress of tenants who could not meet their obligations. This was accomplished by regulating rentals and limiting the landlords' powers of eviction. Not a few of the war measures were incorporated in permanent statutes. In some large cities, especially in England and the United States, the landlord-tenant relation is in a state of flux, and legislatures have under consideration further statutory modifications of old relations to meet new problems.

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See: POSSESSION; OWNERSHIP; LAND TENURE; RENT REGULATION; STATUTE OF FRAUDS; FARM TENANCY.

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LANE, WILLIAM (1861-1917), Australian socialist. Lane was born in England; in 1875 he emigrated to Canada, where he practised journalism until he emigrated to Australia in 1885. He edited a weekly, the *Boomerang*, much read by miners and bush workers, and published several socialist and single tax pamphlets. In 1890 he established the *Queensland Worker*, the first general newspaper supported by trade union subsidies and hence independent of ad-

vertisers. Lane wished to unite trade unionists into a disciplined federation for political and industrial action and in 1889 he established the Australian Federation of Labour, whose general socialist aims took practical shape in reformism. He helped raise £30,423 in Australia for the 1890 London dockers' strike and was active in organizing unsuccessful maritime and pastoral strikes of 1890-91. Despairing of achieving "socialism in our time" through conflict within a capitalist form of society, he turned to utopianism on lines much like those of Hertzka. Obtaining a free grant of 450,000 acres from the government of Paraguay and having collected £30,000, he projected a society based on communal ownership and in 1893 set out with 240 picked socialist settlers to found "New Australia." Later 260 other settlers followed. Want of foresight and discipline, ignorance of pioneering and Lane's autocratic administration seem to have undermined the venture, which failed completely. After another trial at Cosme, in 1899 Lane abandoned his plan. In 1913 he returned to journalism as editor of the *New Zealand Herald*. Toward the end of his life his views became increasingly patriotic and conservative. His plan of financing labor papers, since widely followed, and his effort to federate separated labor units are more important than his adventure into utopianism. But the latter has made him a romantic figure—the nearest approach to a Marx or a Lenin in this regard that Australian labor has known.

G. V. PORTUS

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LANESSAN, JEAN MARIE ANTOINE DE (1843-1919), French colonial administrator. A naturalist and a physician, de Lanessan directed the *Revue internationale des sciences biologiques* from 1878 to 1883. As a member of the Chamber of Deputies from 1881 to 1891 he was sent on several economic missions to the colonies. His success led to his appointment as governor general of Indo-China, in which post from 1891 to 1894 he did his most important work. He again sat in the Chamber from 1898 to 1906 and from 1910 to 1914 and was minister of the Navy from 1899 to 1902.

De Lanessan first organized the central government of Indo-China and laid the foundations for the principal political and financial reforms later carried out by Paul Doumer. He put a stop to the raids of Siamese pirates on the Laotian

provinces of the emperor of Annam and the king of Cambodia, who were under French protection. He contributed greatly to the penetration and pacification of the interior, encouraging the important scientific expeditions of Pavie into regions until then unknown to Europeans. De Lanessan defined and applied to native affairs the policy of biracial cooperation, displacing the theory of assimilation then current. He held it unwise for the small minority of French colonists to try to destroy the native ruling class or to burden the country with two complete administrative systems and advocated instead that the French protectorate employ the mandarins to rule the natives by their traditional systems. His principles of colonial administration, expounded in three books, influenced the colonial doctrines of Marshal Lyautey, who served with him in Indo-China, and have become an important part of the theory of present French colonial administration.

HENRI LABOURET

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LANFRANC (d. 1089), archbishop of Canterbury. Lanfranc was born early in the eleventh century at Pavia. In his youth he devoted himself to juristic studies at a time when the law schools of northern Italy were emerging into prominence as centers of the legal renaissance. At Pavia, where both Lombard and Roman law were studied, he was renowned as a legal teacher. Leaving Italy for Normandy he became about 1039 master of the cathedral school at Avranches. About 1042 he entered the recently founded monastery at Bec and there opened a school which his teaching in theology and law soon made famous. At the same time he began to be an active political force. A few months before the Conquest of England in 1066, William, duke of Normandy, appointed him first abbot of St. Stephen's at Caen. Four years after the Conquest he became archbishop of Canterbury, an office which according to tradition made him the king's chief minister of state. At times during William's absence he also served as royal vice regent. During the last two years of his life, which coincided with the first two years of the reign of

William Rufus, his efforts in the interest of just and stable government were very effectual in counteracting the worst tendencies of that monarch.

Lanfranc's influence upon the conqueror from 1066 on was perhaps the most important factor in the establishment of Norman rule in England. Both the creation of a strong kingship in England and the achievement of a harmonious relationship between church and state were in large measure Lanfranc's work. His mastery of civil and canon law, his familiarity with the law of Lombardy and the facility with which he acquired a knowledge of the Norman and English legal systems are reflected in some of the conqueror's most important policies, including the retention, with Norman modifications, of Anglo-Saxon law, which historically was closely related to Lombard law, and the preparation of the *Domesday Book* as well as the reorganization of the church. Lanfranc's ecclesiastical policy was directed primarily toward the liberation of the church from the fetters of secular interest and state expediency which had characterized the Anglo-Saxon theocracy. He therefore obtained William's permission to deal with church affairs in synods composed exclusively of ecclesiastics; and without doubt it was he who moved William to separate ecclesiastical from lay jurisdiction. Even in such matters, however, Lanfranc tried to harmonize ecclesiastical and political considerations, as in his acknowledgment of the king's right to veto the legislation of synods. Again, although he evidently favored, as did the school at Bec, the doctrine of papal sovereignty, he nevertheless helped the king to maintain the independence of the English church.

The favorable decision of the Council of Winchester in 1072 enabled Lanfranc to preserve the sovereignty of Canterbury over York and thus to prevent a threatened division of the English church. Although the documents upon which the council chiefly based its decision were forged and were undoubtedly prepared at Canterbury, recent research has proved that Lanfranc was not their author and may not have been even privy to them.

Until the middle of the twelfth century the collection of canon law which Lanfranc brought from Bec and which included the famous false decretals—then universally believed genuine—remained not only the authoritative but apparently the sole collection in use in the English church. Lanfranc therefore played a preeminent role in the development of canon law in England.

As Brooke has recently shown, however, in the very act of introducing continental canon law he unconsciously prepared the way for a later "revolt against that system of Church government which he and his royal master had instituted and maintained."

Lanfranc ranks as one of the most eminent teachers of his age. As primate he furthered monasticism, raised the standard of clerical education and discipline and in general introduced ecclesiastical reforms in the true spirit of the Hildebrandine policy. Both by native ability and by special training he was a lawyer, in fact one of the most distinguished lawyers of his time. Within this field he had full opportunity to display his remarkable gifts not only as a royal justiciar in the hearing of causes but chiefly as a statesman in the service of the crown. Much of the constitutional and legal history of England in the early Norman period will be forever associated with his name.

H. D. HAZELTINE

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Consult: Macdonald, A. J., Lanfranc (Oxford 1926); Brooke, Z. N., *The English Church and the Papacy from the Conquest to the Reign of John* (Cambridge, Eng. 1931) p. 57-83, 117-31; Boehmer, Heinrich, *Kirche und Staat in England und in der Normandie* (Leipsic 1899) p. 79-126; *Regesta regum anglo-normannorum, 1066-1154*, ed. by H. W. C. Davis and R. J. Whitwell (Oxford 1913); Davis, H. W. C., *England under the Normans and Angevins, 1066-1272* (9th ed. London 1928); Haskins, C. H., *Norman Institutions*, Harvard Historical Studies, vol. xxiv (Cambridge, Mass. 1918) p. 30, 32, and 57; Pollock, F., and Maitland, F. W., *History of English Law before the Time of Edward I*, 2 vols. (2nd ed. Cambridge, Eng. 1898) vol. i; Holdsworth, W. S., *A History of English Law*, 9 vols. (3rd ed. London 1922-26) vol. ii.

LANG, ANDREW (1844-1912), English anthropologist and folklorist. Although more of a humanist than a man of science, Lang ranks high among the pioneers of anthropology. Like Frazer he was a classical scholar, with two first classes and a fellowship at Oxford to assure him an academic career had he desired it. Instead he chose journalism and the life of a literary free lance; and with amazing versatility he wrote poetry and prose, serious studies and light essays in profusion. In his study of primitive culture his first chief concern was to find a key to classical origins. Coming from St. Andrews to Balliol during the year in which both McLennan's

Primitive Marriage (Edinburgh 1865) and Tylor's *Researches into the Early History of Mankind* (London 1865) appeared, he envisaged civilization as an evolved savagery and from that point of view undertook to combat the current fashion inaugurated by the philologists of treating myth as a "disease of language," an abuse of cosmological metaphor. He became famous at the age of forty with his article "Mythology" (*Encyclopaedia Britannica*, 9th ed. vol. xvii, 1884, p. 135-58), which compared with Max Müller's paper "Comparative Mythology" (*Oxford Essays*, 4 vols., London 1855-58, vol. ii, ch. i) illustrates how completely he turned the tables in favor of the anthropologists (see also his *Modern Mythology: a Reply to Professor Max Müller*, London 1897). In that year he also published *Custom and Myth* (London 1884, new ed. 1904), a collection of essays light in tone but erudite. His *Myth, Ritual and Religion* (London 1887, new ed. 1899), with the possible exception of W. Robertson Smith's *Lectures on the Religion of the Semites* (Edinburgh 1889), may be considered the most important contribution to anthropology in England in the two decades that intervene between Tylor's *Primitive Culture* (2 vols., London 1871) and Frazer's *The Golden Bough* (2 vols., London 1890). Lang who was an original member of the Folk-lore Society, founded in 1878, was at the same time issuing innumerable publications relating to folk tales, folk songs and the Homeric cycle of poems. During this earlier period although Lang always worked in a single handed and detached way he was one of the leading defenders of Tylor's anthropological views. When he published *The Making of Religion* (London 1898, 2nd ed. 1900), however, he broke with anthropologists who believed in the animistic theory of the evolution of religion. He contended that the theory overlooked two sets of facts, the evidence favoring the genuineness of psychical phenomena and the evidence tending to show that there is a primitive theism of an ethical character which did not originate in any form of animistic belief. Henceforth Lang was suspect in the eyes of the experts. His subsequent works, *Social Origins* (London 1903), which incorporated some original suggestions of his cousin, J. J. Atkinson, and *The Secret of the Totem* (London 1905), both of which dealt with the important subjects of exogamy and totemism, were largely ignored by his contemporaries. Throughout his life and especially toward the end of it Lang was a brilliant critic who vindicated his intrepid intel-

lectual independence even at the cost of a certain isolation.

R. R. MARETT

Consult: Rait, R. S., Reinach, Salomon, Murray, Gilbert, and Millar, J. H., in *Quarterly Review*, vol. ccxviii (1913) 299–329; Clodd, Edward, Marett, R. R., von Gennep, A., Rivers, W. H. R., and Schmidt, Wilhelm, in *Folk-lore*, vol. xxiii (1912) 358–75; Jacobs, J., “Andrew Lang as Man of Letters and Folk-lorist” in *Journal of American Folk-lore*, vol. xxvi (1913) 367–72; Saintsbury, George, “Andrew Lang in the 'Seventies—and After” in *The Eighteen Seventies*, ed. by Harley Granville-Barker (Cambridge, Eng. 1929) p. 80–95.

LÁNG, BARON LAJOS (1849–1918), Hungarian statistician, economist and statesman. Láng was professor of statistics at the University of Budapest. From 1889 to 1893 he was state secretary of finance and from 1902 to 1903 minister of commerce. In his economic views as laid down in his *A közgazdaság elmélete* (Theory of economics, Budapest 1882) and *A vámpolitika az utolsó száz évben* (Budapest 1904; tr. into German by A. Rosen as *Hundert Jahre Zollpolitik*, Vienna 1905) he followed the traditional method of classical analysis. He displayed more originality in his *A statisztika története* (History of statistics, Budapest 1913), which traces the development of statistics from its beginnings to the World War. It presents a clear exposition of Malthus' doctrines in which the geometric ratio of population growth and the arithmetic ratio of increase in the food supply are assigned only an illustrative value, and “moral restraint” is interpreted as abstention from marriage by persons unable to support a family rather than as any form of control in married life. Criticizing Quételet's attempt to extend the laws of the physical universe to society, which must always be viewed as composed of mass collectives, Láng regarded as Quételet's greatest contribution the introduction of mathematical methods into statistics and its transformation into a science of averages.

Láng also attracted attention with his *Javaslat a quota megállapítására* (Proposal for determining the quota, Budapest 1897), in which he attempted to provide an objective basis for the determination of Hungary's share in financing the joint governmental functions, such as war and the diplomatic service, of Austria-Hungary. He thus hoped to avoid the frequent outbursts of political strife which marked the periodical equalization conferences between the two constituents of the empire. As a statesman Láng had ample opportunity to apply his economic views

to contemporary economic policy and he became one of the most outstanding spokesmen of economic liberalism in Hungary.

FRÉDÉRIC DE FELLNER

Consult: Concha, Győző, in Royal Hungarian Academy, *Akadémiai értesítő* (May 1918); Fellner, Frigyes, in *Közgazdasági szemle* (Economic review), vol. xlii (1918); Vargha, Jules de, in Institut International de Statistique, *Bulletin*, vol. xxi (1924) pt. i, p. 341–45, with bibliography.

LANGDELL, CHRISTOPHER COLUMBUS (1826–1906), American jurist. Langdell was Dane professor of law at Harvard from 1870 to 1900; dean of the faculty of law from 1870 to 1895; editor of a series of casebooks on property, personal property, equity pleading and equity jurisdiction; and author of several works: *A Brief Survey of Equity Jurisdiction* (Cambridge, Mass. 1905; 2nd ed. 1908), *A Summary of the Law of Contracts* (appeared first as part of vol. ii of 2nd ed. of *A Selection of Cases on the Law of Contracts*, 2 vols., Boston 1879; separate publication Boston 1880) and *A Summary of Equity Pleading* (Cambridge, Mass. 1877; 2nd ed. 1883). His fame rests primarily upon his introduction of the so-called case system of studying law. The theory which led Langdell to regard this system as a “truly scientific” way of studying law was stated by him as follows: “Law, considered as a science, consists of certain principles or doctrines. To have such a mastery of these as to be able to apply them with constant facility and certainty to the ever-tangled skein of human affairs, is what constitutes a true lawyer” (Preface to *A Selection of Cases on the Law of Contracts*). In taking this view Langdell naturally followed the ideas of scientific method then prevalent: ideas which seem to many present day students to oversimplify the problem of the formulation and application of “principles” in any field of thought. The *Summary of Equity Pleading* is the only one of Langdell's treatises which really covers its subject. Written in a vigorous and terse style it contains an illuminating historical and analytical study of the fundamental ideas underlying the system of pleading in equity. Especially important are the demonstration of the derivation of the system from that which prevailed in the ecclesiastical courts and the comparison of common law pleading with equity pleading. In all his writings Langdell emphasized as fundamental that “equity acts *in personam*” and not “*in rem*.” This theory or at least the most usual interpretation of it was not very realistic. It has

been described as a "palpable sophism" (Phelps, C. E., *Falstaff and Equity*, Boston 1901, p. 46).

WALTER WHEELER COOK

Consult: *Harvard Law Review*, vol. xx (1906-07) 1-13; Ames, J. B., in *Great American Lawyers*, 8 vols. (Philadelphia 1907-09) vol. viii, p. 465-89; Eliot, Charles W., "Langdell and the Law School" in *Harvard Law Review*, vol. xxxiii (1919-20) 518-25.

LANGE, CARL GEORG (1834-1900), Danish neurologist. Lange, who was professor of pathological anatomy at the University of Copenhagen from 1877 until his death, is best known for his contribution in 1885 to the theory that emotions are the result of sensations arising from organic responses. William James had expressed similar views in 1884 and the theory, which became known as the James-Lange theory of emotions, had great influence on contemporary and later psychology. Lange developed his ideas on a narrower basis than did James; he ascribed emotions to disturbances in the circulatory system alone, declaring that if the vasomotor system were not excited one would wander through life unsympathetic and passionless, experiencing neither joy nor anger, care nor fear. Since wine, mushrooms, hashish, opium, cold baths and other agencies cause physiological effects which are accompanied by altered states of feeling and since removal of the physical manifestations of fear removes fear itself, he drew the conclusion that emotion is only a perception of bodily changes. Evidence has been urged against the James-Lange theory that the exclusion of vasomotor control of the blood vessels either by the severance of the spinal cord or by the removal of the sympathetic system leaves animals acting as emotionally as before except for the participation of denervated organs, and that human beings with injuries or diseases which separate the vasomotor system from the brain testify to no alteration of their emotional tone. Nevertheless, the theory still has vigorous defenders.

W. B. CANNON

Important works: *Om sindsbevaegelser* (Copenhagen 1885), tr. from German ed. in *The Emotions*, ed. by K. Dunlap (Baltimore 1922); *Bidrag til nydelsernes fysiologi, som grundlag for en rationel æstetik* (A contribution to the physiology of pleasure as a basis for rational aesthetics) (Copenhagen 1899).

Consult: Petersen, O., in *Biographisches Lexikon der hervorragenden Ärzte*, vol. iii (2nd ed. Berlin 1931) p. 666.

LANGE, FRIEDRICH ALBERT (1828-75), German philosopher and social reformer. Lange was born near Solingen. His father, a Protestant

clergyman of proletarian origin, became a professor at Zurich, where Lange absorbed the democratic, republican spirit of Swiss political thought. After teaching in *Gymnasien* and at the University of Bonn he abandoned academic work because of political difficulties and became secretary of the Duisburg Chamber of Commerce and an editor of the *Rhein- und Ruhr-Zeitung*. Forced to resign from these posts, again for political reasons, for nine months he published his own newspaper, the *Bote vom Niederrhein*. To escape political persecution for ideas expressed in his books he returned to Switzerland. In 1870 he became professor of philosophy and literature in Zurich and in 1873 returned to Germany as professor of philosophy at Marburg.

Lange is an excellent representative of the intellectual in the labor movement. At first an adherent of the Progressive party, which was strongly opposed to the Prussian government, his interest in workers and peasants brought him into conflict with its purely bourgeois policy. He was one of the first to support the labor movement led by Bebel and was particularly successful at the Leipsic labor congress of 1864 in allaying its conflict with the Lassallean current. He was a socialist in so far as he studied social development from the standpoint of workers' interests and saw true emancipation as dependent on the establishment of a new, cooperative social order. Lange's view of social laws, which was connected with his essentially biological point of view, was cramped by his failure to recognize the importance of the class struggle in social development. For this reason he was criticized by Marx and came into conflict with the rapidly developing labor movement, both the Lassallean and Bebelian wings of which were leaning increasingly toward the position of the class struggle. Although to his regret his book on the labor question made a greater impression outside labor circles than within them it had great historical significance as the first work by a bourgeois academician which recognized the workers' special claims and considered social developments from the point of view of their satisfaction.

Today Lange is remembered more as a philosopher than as a social thinker. His history of materialism, which dominated philosophic thought for several decades, is still useful both for its demonstration of the philosophic limitations of metaphysical materialism and for its appreciation of the value of materialism as a stimulus to critical thinking. The weakness of

the work, again deriving from Lange's biological point of view, is its failure to recognize the importance of the Kantian critique of knowledge and the new forms of historical and dialectical materialism. The book's enormous circulation was partly responsible for the spread of the interpretation of Kantian philosophy as a dualism which views knowledge as the outcome of intellectual activity and an external object.

MAX ADLER

Chief works: *Die Arbeiterfrage* (Duisburg 1865; rev. ed. by A. Grabowsky, Leipsic 1910); *J. S. Mill's Ansichten über die sociale Frage, und die angebliche Umwälzung der Socialwissenschaft durch Carey* (Duisburg 1866); *Geschichte des Materialismus und Kritik seiner Bedeutung in der Gegenwart* (Iserlohn 1866; new ed. by H. Schmidt, 2 vols., Leipsic 1926), tr. by E. C. Thomas, 3 vols. (3rd ed. London 1890; reprinted with introduction by Bertrand Russell, 1 vol., Edinburgh 1925).

Consult: Ellissen, O. A., *Friedrich Albert Lange* (Leipsic 1891); Bebel, August, *Aus meinem Leben*, 3 vols. (Stuttgart 1910-14) vol. i, p. 97-100, partially tr. as *My Life* (Chicago 1912) p. 65-66; Mehring, Franz, "Aus der Frühzeit der deutschen Arbeiterbewegung" in *Archiv für die Geschichte des Sozialismus und der Arbeiterbewegung*, vol. i (1911) 101-33, and his introduction to Grabowsky's edition of *Die Arbeiterfrage* (Leipsic 1910) p. 9-13; Cohen, Hermann, Introduction and critical appendix to his edition of Lange's *Geschichte des Materialismus . . .*, 2 vols. (Leipsic 1902) vol. i, p. v-xiii, 435-535; Berdiajew, Nikolai, "Friedrich Albert Lange und die kritische Philosophie in ihren Beziehungen zum Sozialismus" in *Neue Zeit*, vol. xviii, pt. ii (1900) 132-40, 164-74, 196-207; Reichesberg, Naum, *Friedrich Albert Lange als Nationalökonom*, Berner Beiträge zur Geschichte der National-Ökonomie, no. 4 (Berne 1892).

LANGE, HELENE (1848-1930), German feminist. Her native independence and courage brought Helene Lange early recognition in liberal circles in Berlin, where she became principal of a girls' school in 1876. In 1887 she attracted nation wide attention with her pamphlet on girls' high schools, in which she attacked the educational ideals of the finishing school and maintained the right of women to an education for their own sake. The pamphlet accompanied a petition to the Prussian Diet calling for women's fuller participation in the instruction of girls and for state training of women for teaching. The Diet took no action. Two years later, however, courses were privately formed to supplement the inadequate instruction in the girls' high schools, and these *Realkurse* were put into the hands of Helene Lange. She transformed them in 1893 into a sort of university preparatory school, thereby offering an opportunity for girls to

qualify for higher education and thus accomplishing an important step toward opening the universities to women students. Meanwhile in 1890 she had founded the Allgemeine Deutsche Lehrerinnenverein, an association for women teachers, which under her guidance soon developed into one of the most powerful of the feminist organizations. She was a member of the board and a leader in the Allgemeine Deutsche Frauenverein, Germany's pioneer feminist society, and in the Federation of Women's Associations, the Bund Deutscher Frauenvereine. In 1919-20 she served on the city council of Hamburg. In the main, however, she exerted her influence through her teachers' association and through her writings. *Frau*, the most generally representative German feminist magazine, was founded by her in 1893 and continued under her editorship until her death. Her articles here as well as her other publications are characterized by perspicacity and a certain racy directness of approach coupled with a liberal understanding of human nature. Throughout her entire career she battled against superficiality, especially in women's training for life.

HUGH WILEY PUCKETT

Important works: *Die höhere Mädchenschule und ihre Bestimmung* (Berlin 1887); *Handbuch der Frauenbewegung*, ed. in collaboration with Gertrud Bäumer, 5 vols. (Berlin 1901-06); *Die Frauenbewegung in ihren modernen Problemen* (Berlin 1908, 3rd ed. Leipsic 1924); *Lebenserinnerungen* (Berlin 1921).

Consult: Bäumer, Gertrud, *Helene Lange zu ihrem 70. Geburtstage* (2nd ed. Berlin 1918), and *Studien über Frauen* (3rd ed. Berlin 1924); "Zum Gedächtnis von Helene Lange" in *Frau*, vol. xxxvii (1929-30) no. 9; Puckett, H. W., *Germany's Women Go Forward* (New York 1930) ch. viii.

LANGLAND, WILLIAM (1332?-99), English poet. Langland was the probable author of *Piers Plowman*. About 1355 he drifted to London, where as a clerk in lower orders he lived on from hand to mouth for the rest of his life. The three versions of *Piers Plowman*, each fuller than its predecessor, may be dated fairly exactly: 1362 or 1363; 1377; 1398 or 1399. The hero of the poem undertakes to answer difficulties which the official church cannot solve. The world is governed by "Lady Meed"—i.e. unlawful gain; most men take no heed for the future so long as they can enjoy the present. The church is indeed indispensable, yet she is deeply corrupted. Pilgrims flock to hundreds of shrines, yet none of them has ever heard of "Saint Truth." Piers comes forward and offers himself as guide, but his

gospel proves too simple for the hierarchy to trouble about: "At the Last Day, the real deciding factor will be the sort of life that a man has led." The poem drifts through long discussions on all the problems of the day—capital and labor, free will and determinism and so on—but the author can only cast side lights; he cannot ultimately decide. The last three cantos are focused upon the sacrifice and resurrection of Jesus Christ, symbolizing love, which to Langland offers a practical solution for all difficulties. In conclusion he describes the gradual decay of the church, with the consequent necessity for conscience to abandon whatever seems untenable in religious institutionalism and to wander forth to life's end in search of the Christ that is to be.

Piers Plowman contains the fullest treatment of social life of that or any neighboring century. By education Langland could understand the rich; his life's experience gave him sympathy with the poor; and his poem pictures the life of all classes. It deals directly with the problems and aims and difficulties of "the man in the street," and no one else in the entire Middle Ages has treated so fully and sympathetically the life of the peasantry, who formed at least 90 per cent of the population. Langland was ahead of his times in his political and religious views. His latent radicalism, his spirit of inquiry, his uncertain groping toward some solution for the ills of society, mark him as important in the transition from the mediaeval to the modern mind.

G. G. COULTON

Works: The Vision of William concerning Piers the Plowman . . . together with Richard the Redeless, ed. by W. W. Skeat, 2 vols. (Oxford 1886); a good modern version is that by Arthur Burrell, *Piers Plowman, a Version for the Modern Reader*, Everyman's Library (London 1912).

Consult: Manly, J. M., Jusserand, J. J., and Chambers, R. W., *The Piers Plowman Controversy*, Early English Text Society, vol. cxxxix, b, c, d, e (London 1910); Bright, A. H., *New Light on Piers Plowman* (Oxford 1928); Coultton, G. G., *The Medieval Scene* (Cambridge, Eng. 1930) p. 157–63; Hittmair, Rudolf, "Der Begriff der Arbeit bei Langland" in *Neusprachliche Studien, Festgabe Karl Luick*, Neuere Sprachen, supplementary no. vi (Marburg 1925); Chadwick, D., *Social Life in the Days of Piers Plowman* (Cambridge, Eng. 1922).

LANGLOIS, CHARLES VICTOR (1863–1929), French historian. As professor of history at the Sorbonne and later as director of the Archives Nationales of France Langlois was the outstanding exponent in France of scientific method in historiography. At the same time he

contributed penetrating studies on the history of institutions and of French civilization and society from the end of the twelfth to the middle of the fourteenth century, concentrating on the age of St. Louis and his immediate successors. His doctoral thesis, *Le règne de Philippe III, le Hardi* (Paris 1887), was followed by researches on the administrative system of the Capetians during the thirteenth century and at the beginning of the fourteenth, particularly on the Parlement of Paris, financial administration, the royal commissioners and the royal chancery. His own monographs—notably *De monumentis ad priorem curiae regis judicariae historiam pertinentibus* (Paris 1887), *Textes relatifs à l'histoire du parlement depuis les origines jusqu'en 1314* (Paris 1888), "Les origines du parlement de Paris" (in *Revue historique*, vol. xlii, 1890, p. 74–114), *Registres perdus des archives de la chambre des comptes de Paris* (Paris 1916)—which are a partial embodiment of the results of his researches in this field, were supplemented by numerous other studies carried out under his supervision by his students. In the realm of social history his outstanding monographs based on archive material are "Doléances recueillies par les enquêteurs de Saint Louis et des derniers Capétiens directs" and "Les doléances des communautés du Toulousain" (in *Revue historique*, vol. xcii, 1906, p. 1–41, vol. xcv, 1907, p. 21–53 and vol. c, 1909, p. 63–95). The results of another and more important series of studies in this field, based on mediaeval literary remains, appeared in three volumes (Paris 1903–11) and were later reissued with an additional volume as *La vie en France au moyen âge, de la fin du XII^e au milieu du XIV^e siècle* (Paris 1924–28). Langlois' volume *Saint Louis, Philippe le Bel, les derniers Capétiens directs* (Paris 1901) in the *Histoire de France*, edited by Ernest Lavisse, is an attempt to present to a large public the results of his exhaustive research. From his voluminous contributions on the intellectual and moral history of the Middle Ages and on problems of education a limited collection has been made in *Questions d'histoire et d'enseignement* (2 vols., Paris 1902–06).

LOUIS HALPHEN

Other important works: *Les archives de l'histoire de France*, in collaboration with H. Stein, 2 vols. (Paris 1891–92); *Manuel de bibliographie historique*, 2 vols. (Paris 1891–1904; vol. i, 2nd ed. 1901); *Introduction aux études historiques*, in collaboration with C. Seignobos (Paris 1898), tr. by G. G. Berry (London 1898).

Consult: Fawtier, R., in *English Historical Review*, vol. xlv (1930) 85–91.

LANGUAGE. The gift of speech and a well ordered language are characteristic of every known group of human beings. No tribe has ever been found which is without language and all statements to the contrary may be dismissed as mere folklore. There seems to be no warrant whatever for the statement which is sometimes made that there are certain peoples whose vocabulary is so limited that they cannot get on without the supplementary use of gesture, so that intelligible communication between members of such a group becomes impossible in the dark. The truth of the matter is that language is an essentially perfect means of expression and communication among every known people. Of all aspects of culture it is a fair guess that language was the first to receive a highly developed form and that its essential perfection is a prerequisite to the development of culture as a whole.

There are some general characteristics which apply to all languages, living or extinct, written or unwritten. In the first place language is primarily a system of phonetic symbols for the expression of communicable thought and feeling. In other words, the symbols of language are differentiated products of the vocal behavior which is associated with the larynx of the higher mammals. As a mere matter of theory it is conceivable that something like a linguistic structure could have been evolved out of gesture or other forms of bodily behavior. The fact that at an advanced stage in the history of the human race writing emerged in close imitation of the patterns of spoken language proves that language as a purely instrumental and logical device is not dependent on the use of articulate sounds. Nevertheless, the actual history of man and a wealth of anthropological evidence indicate with overwhelming certainty that phonetic language takes precedence over all other kinds of communicative symbolism, which are by comparison either substitutive, like writing, or merely supplementary, like the gesture accompanying speech. The speech apparatus which is used in the articulation of language is the same for all known peoples. It consists of the larynx, with its delicately adjustable glottal chords, the nose, the tongue, the hard and soft palate, the teeth and the lips. While the original impulses leading to speech may be thought of as localized in the larynx, the finer phonetic articulations are due chiefly to the muscular activity of the tongue, an organ whose primary function has of course nothing whatever to do with sound production

but which in actual speech behavior is indispensable for the development of emotionally expressive sound into what we call language. It is so indispensable in fact that one of the most common terms for language or speech is "tongue." Language is thus not a simple biological function even as regards the simple matter of sound production, for primary laryngeal patterns of behavior have had to be completely overhauled by the interference of lingual, labial and nasal modifications before a "speech organ" was ready for work. Perhaps it is because this speech organ is a diffused and secondary network of physiological activities which do not correspond to the primary functions of the organs involved that language has been enabled to free itself from direct bodily expressiveness.

Not only are all languages phonetic in character; they are also "phonemic." Between the articulation of the voice into the phonetic sequence, which is immediately audible as a mere sensation, and the complicated patterning of phonetic sequences into such symbolically significant entities as words, phrases and sentences there is a very interesting process of phonetic selection and generalization which is easily overlooked but which is crucial for the development of the specifically symbolic aspect of language. Language is not merely articulated sound; its significant structure is dependent upon the unconscious selection of a fixed number of "phonetic stations," or sound units. These are in actual behavior individually modifiable; but the essential point is that through the unconscious selection of sounds as phonemes definite psychological barriers are erected between various phonetic stations, so that speech ceases to be an expressive flow of sound and becomes a symbolic composition with limited materials or units. The analogy with musical theory seems quite fair. Even the most resplendent and dynamic symphony is built up of tangibly distinct musical entities or notes which in the physical world flow into each other in an indefinite continuum but which in the world of aesthetic composition and appreciation are definitely bounded off against each other, so that they may enter into an intricate mathematics of significant relationships. The phonemes of a language are in principle a distinct system peculiar to the given language, and its words must be made up, in unconscious theory if not always in actualized behavior, of these phonemes. Languages differ very widely in their phonemic structure. But whatever the details of these structures may be,

the important fact remains that there is no known language which has not a perfectly definite phonemic system. The difference between a sound and a phoneme can be illustrated by a simple example in English. If the word *matter* is pronounced in a slovenly fashion, as in the phrase "What's the matter?" the *t* sound, not being pronounced with the full energy required to bring out its proper physical characteristics, tends to slip into a *d*. Nevertheless, this phonetic *d* will not be felt as a functional *d* but as a variety of *t* of a particular type of expressiveness. Obviously the functional relation between the proper *t* sound of such a word as *matter* and its *d* variant is quite other than the relation of the *t* of such a word as *town* and the *d* of *down*. In every known language it is possible to distinguish merely phonetic variations, whether expressive or not, from symbolically functional ones of a phonemic order.

In all known languages phonemes are built up into distinct and arbitrary sequences which are at once recognized by the speakers as meaningful symbols of reference. In English, for instance, the sequence *g* plus *o* in the word *go* is an unanalyzable unit and the meaning attaching to the symbol cannot be derived by relating to each other values which might be imputed to the *g* and to the *o* independently. In other words, while the mechanical functional units of language are phonemes, the true units of language as symbolism are conventional groupings of such phonemes. The size of these units and the laws of their mechanical structure vary widely in the different languages and their limiting conditions may be said to constitute the phonemic mechanics, or phonology, of a particular language. But the fundamental theory of sound symbolism remains the same everywhere. The formal behavior of the irreducible symbol also varies within wide limits in the languages of the world. Such a unit may be either a complete word, as in the English example already given, or a significant element, like the suffix *ness* of goodness. Between the meaningful and unanalyzable word or word element and the integrated meaning of continuous discourse lies the whole complicated field of the formal procedures which are intuitively employed by the speakers of a language in order to build up aesthetically and functionally satisfying symbol sequences out of the theoretically isolable units. These procedures constitute grammar, which may be defined as the sum total of formal economies intuitively recognized by the speakers of a language. There seem

to be no types of cultural patterns which vary more surprisingly and with a greater exuberance of detail than the morphologies of the known languages. In spite of endless differences of detail, however, it may justly be said that all grammars have the same degree of fixity. One language may be more complex or difficult grammatically than another, but there is no meaning whatever in the statement which is sometimes made that one language is more grammatical, or form bound, than another. Our rationalizations of the structure of our own language lead to a self-consciousness of speech and of academic discipline which are of course interesting psychological and social phenomena in themselves but have very little to do with the question of form in language.

Besides these general formal characteristics language has certain psychological qualities which make it peculiarly important for the student of social science. In the first place, language is felt to be a perfect symbolic system, in a perfectly homogeneous medium, for the handling of all references and meanings that a given culture is capable of, whether these be in the form of actual communications or in that of such ideal substitutes of communication as thinking. The content of every culture is expressible in its language and there are no linguistic materials whether as to content or form which are not felt to symbolize actual meanings, whatever may be the attitude of those who belong to other cultures. New cultural experiences frequently make it necessary to enlarge the resources of a language, but such enlargement is never an arbitrary addition to the materials and forms already present; it is merely a further application of principles already in use and in many cases little more than a metaphorical extension of old terms and meanings. It is highly important to realize that once the form of a language is established it can discover meanings for its speakers which are not simply traceable to the given quality of experience itself but must be explained to a large extent as the projection of potential meanings into the raw material of experience. If a man who has never seen more than a single elephant in the course of his life nevertheless speaks without the slightest hesitation of ten elephants or a million elephants or a herd of elephants or of elephants walking two by two or three by three or of generations of elephants, it is obvious that language has the power to analyze experience into theoretically dissociable elements and to create that world of the potential intergrading

with the actual which enables human beings to transcend the immediately given in their individual experiences and to join in a larger common understanding. This common understanding constitutes culture, which cannot be adequately defined by a description of those more colorful patterns of behavior in society which lie open to observation. Language is heuristic, not merely in the simple sense which this example suggests but in the much more far reaching sense that its forms predetermine for us certain modes of observation and interpretation. This means of course that as our scientific experience grows we must learn to fight the implications of language. "The grass waves in the wind" is shown by its linguistic form to be a member of the same relational class of experiences as "The man works in the house." As an interim solution of the problem of expressing the experience referred to in this sentence it is clear that the language has proved useful, for it has made significant use of certain symbols of conceptual relation, such as agency and location. If we feel the sentence to be poetic or metaphorical, it is largely because other more complex types of experience with their appropriate symbolisms of reference enable us to reinterpret the situation and to say, for instance, "The grass is waved by the wind" or "The wind causes the grass to wave." The point is that no matter how sophisticated our modes of interpretation become, we never really get beyond the projection and continuous transfer of relations suggested by the forms of our speech. After all, to say that "Friction causes such and such a result" is not very different from saying that "The grass waves in the wind." Language is at one and the same time helping and retarding us in our exploration of experience, and the details of these processes of help and hindrance are deposited in the subtler meanings of different cultures.

A further psychological characteristic of language is the fact that while it may be looked upon as a symbolic system which reports or refers to or otherwise substitutes for direct experience, it does not as a matter of actual behavior stand apart from or run parallel to direct experience but completely interpenetrates with it. This is indicated by the widespread feeling, particularly among primitive people, of that virtual identity or close correspondence of word and thing which leads to the magic of spells. On our own level it is generally difficult to make a complete divorce between objective reality and our linguistic symbols of reference to it; and

things, qualities and events are on the whole felt to be what they are called. For the normal person every experience, real or potential, is saturated with verbalism. This explains why so many lovers of nature, for instance, do not feel that they are truly in touch with it until they have mastered the names of a great many flowers and trees, as though the primary world of reality were a verbal one and as though one could not get close to nature unless one first mastered the terminology which somehow magically expresses it. It is this constant interplay between language and experience which removes language from the cold status of such purely and simply symbolic systems as mathematical symbolism or flag signaling. This interpenetration is not only an intimate associative fact; it is also a contextual one. It is important to realize that language may not only refer to experience or even mold, interpret and discover experience but that it also substitutes for it in the sense that in those sequences of interpersonal behavior which form the greater part of our daily lives speech and action supplement each other and do each other's work in a web of unbroken pattern. If one says to me "Lend me a dollar," I may hand over the money without a word or I may give it with an accompanying "Here it is" or I may say "I haven't got it. I'll give it to you tomorrow." Each of these responses is structurally equivalent, if one thinks of the larger behavior pattern. It is clear that if language is in its analyzed form a symbolic system of reference it is far from being merely that if we consider the psychological part that it plays in continuous behavior. The reason for this almost unique position of intimacy which language holds among all known symbolisms is probably the fact that it is learned in the earliest years of childhood.

It is because it is learned early and piecemeal, in constant association with the color and the requirements of actual contexts, that language in spite of its quasi-mathematical form is rarely a purely referential organization. It tends to be so only in scientific discourse, and even there it may be seriously doubted whether the ideal of pure reference is ever attained by language. Ordinary speech is directly expressive and the purely formal patterns of sounds, words, grammatical forms, phrases and sentences are always to be thought of as compounded with intended or unintended symbolisms of expression, if they are to be understood fully from the standpoint of behavior. The choice of words in a particular context may convey the opposite of what they

mean on the surface. The same external message is differently interpreted according to whether the speaker has this or that psychological status in his personal relations, or whether such primary expressions as those of affection or anger or fear may inform the spoken words with a significance which completely transcends their normal value. On the whole, however, there is no danger that the expressive character of language will be overlooked. It is too obvious a fact to call for much emphasis. What is often overlooked and is, as a matter of fact, not altogether easy to understand is that the quasi-mathematical patterns, as we have called them, of the grammarian's language, unreal as these are in a contextual sense, have nevertheless a tremendous intuitional vitality; and that these patterns, never divorced in experience from the expressive ones, are nevertheless easily separated from them by the normal individual. The fact that almost any word or phrase can be made to take on an infinite variety of meanings seems to indicate that in all language behavior there are intertwined in enormously complex patterns isolable patterns of two distinct orders. These may be roughly defined as patterns of reference and patterns of expression.

That language is a perfect symbolism of experience, that in the actual contexts of behavior it cannot be divorced from action and that it is the carrier of an infinitely nuanced expressiveness are universally valid psychological facts. There is a fourth general psychological peculiarity which applies more particularly to the languages of sophisticated peoples. This is the fact that the referential form systems which are actualized in language behavior do not need speech in its literal sense in order to preserve their substantial integrity. The history of writing is in essence the long attempt to develop an independent symbolism on the basis of graphic representation, followed by the slow and begrudging realization that spoken language is a more powerful symbolism than any graphic one can possibly be and that true progress in the art of writing lay in the virtual abandonment of the principle with which it originally started. Effective systems of writing, whether alphabetic or not, are more or less exact transfers of speech. The original language system may maintain itself in other and remoter transfers, one of the best examples of these being the Morse telegraph code. It is a very interesting fact that the principle of linguistic transfer is not entirely absent even among the unlettered peoples of the

world. Some at least of the drum signal and horn signal systems of the west African natives are in principle transfers of the organizations of speech, often in minute phonetic detail.

Many attempts have been made to unravel the origin of language but most of these are hardly more than exercises of the speculative imagination. Linguists as a whole have lost interest in the problem and this for two reasons. In the first place, it has come to be realized that there exist no truly primitive languages in a psychological sense, that modern researches in archaeology have indefinitely extended the time of man's cultural past and that it is therefore vain to go much beyond the perspective opened up by the study of actual languages. In the second place, our knowledge of psychology, particularly of the symbolic processes in general, is not felt to be sound enough or far reaching enough to help materially with the problem of the emergence of speech. It is probable that the origin of language is not a problem that can be solved out of the resources of linguistics alone but that it is essentially a particular case of a much wider problem of the genesis of symbolic behavior and of the specialization of such behavior in the laryngeal region, which may be presumed to have had only expressive functions to begin with. Perhaps a close study of the behavior of very young children under controlled conditions may provide some valuable hints, but it seems dangerous to reason from such experiments to the behavior of precultural man. It is more likely that the kinds of studies which are now in progress of the behavior of the higher apes will help supply some idea of the genesis of speech.

The most popular earlier theories were the interjectional and onomatopoeic theories. The former derived speech from involuntary cries of an expressive nature, while the latter maintained that the words of actual language are conventionalized forms of imitation of the sounds of nature. Both of these theories suffer from two fatal defects. While it is true that both interjectional and onomatopoeic elements are found in most languages, they are always relatively unimportant and tend to contrast somewhat with the more normal materials of language. The very fact that they are constantly being formed anew seems to indicate that they belong rather to the directly expressive layer of speech which intercrosses with the main level of referential symbolism. The second difficulty is even more serious. The essential problem of the origin of

speech is not to attempt to discover the kinds of vocal elements which constitute the historical nucleus of language. It is rather to point out how vocal articulations of any sort could become dissociated from their original expressive value. About all that can be said at present is that while speech as a finished organization is a distinctly human achievement, its roots probably lie in the power of the higher apes to solve specific problems by abstracting general forms or schemata from the details of given situations; that the habit of interpreting certain selected elements in a situation as signs of a desired total one gradually led in early man to a dim feeling for symbolism; and that in the long run and for reasons which can hardly be guessed at the elements of experience which were most often interpreted in a symbolic sense came to be the largely useless or supplementary vocal behavior that must have often attended significant action. According to this point of view language is not so much directly developed out of vocal expression as it is an actualization in terms of vocal expression of the tendency to master reality, not by direct and ad hoc handling of its elements but by the reduction of experience to familiar forms. Vocal expression is only superficially the same as language. The tendency to derive speech from emotional expression has not led to anything tangible in the way of scientific theory and the attempt must now be made to see in language the slowly evolved product of a peculiar technique or tendency which may be called the symbolic one, and to see the relatively meaningless or incomplete part as a sign of the whole. Language then is what it is essentially not because of its admirable expressive power but in spite of it. Speech as behavior is a wonderfully complex blend of two pattern systems, the symbolic and the expressive, neither of which could have developed to its present perfection without the interference of the other.

It is difficult to see adequately the functions of language, because it is so deeply rooted in the whole of human behavior that it may be suspected that there is little in the functional side of our conscious behavior in which language does not play its part. The primary function of language is generally said to be communication. There can be no quarrel with this so long as it is distinctly understood that there may be effective communication without overt speech and that language is highly relevant to situations which are not obviously of a communicative sort. To say that thought, which is hardly pos-

sible in any sustained sense without the symbolic organization brought by language, is that form of communication in which the speaker and the person addressed are identified in one person is not far from begging the question. The autistic speech of children seems to show that the purely communicative aspect of language has been exaggerated. It is best to admit that language is primarily a vocal actualization of the tendency to see reality symbolically, that it is precisely this quality which renders it a fit instrument for communication and that it is in the actual give and take of social intercourse that it has been complicated and refined into the form in which it is known today. Besides the very general function which language fulfils in the spheres of thought, communication and expression which are implicit in its very nature there may be pointed out a number of special derivatives of these which are of particular interest to students of society.

Language is a great force of socialization, probably the greatest that exists. By this is meant not merely the obvious fact that significant social intercourse is hardly possible without language but that the mere fact of a common speech serves as a peculiarly potent symbol of the social solidarity of those who speak the language. The psychological significance of this goes far beyond the association of particular languages with nationalities, political entities or smaller local groups. In between the recognized dialect or language as a whole and the individualized speech of a given individual lies a kind of linguistic unit which is not often discussed by the linguist but which is of the greatest importance to social psychology. This is the subform of a language which is current among a group of people who are held together by ties of common interest. Such a group may be a family, the undergraduates of a college, a labor union, the underworld in a large city, the members of a club, a group of four or five friends who hold together through life in spite of differences of professional interest, and untold thousands of other kinds of groups. Each of these tends to develop peculiarities of speech which have the symbolic function of somehow distinguishing the group from the larger group into which its members might be too completely absorbed. The complete absence of linguistic indices of such small groups is obscurely felt as a defect or sign of emotional poverty. Within the confines of a particular family, for instance, the name *Georgy*, having once been mispronounced

Doody in childhood, may take on the latter form forever after; and this unofficial pronunciation of a familiar name as applied to a particular person becomes a very important symbol indeed of the solidarity of a particular family and of the continuance of the sentiment that keeps its members together. A stranger cannot lightly take on the privilege of saying Doody if the members of the family feel that he is not entitled to go beyond the degree of familiarity symbolized by the use of Georgy or George. Again, no one is entitled to say "trig" or "math" who has not gone through certain familiar and painful experiences as a high school or undergraduate student. The use of such words at once declares the speaker a member of an unorganized but psychologically real group. A self-made mathematician has hardly the right to use the word "math" in referring to his own interests because the student overtones of the word do not properly apply to him. The extraordinary importance of minute linguistic differences for the symbolization of psychologically real as contrasted with politically or sociologically official groups is intuitively felt by most people. "He talks like us" is equivalent to saying "He is one of us."

There is another important sense in which language is a socializer beyond its literal use as a means of communication. This is in the establishment of rapport between the members of a physical group, such as a house party. It is not what is said that matters so much as that something is said. Particularly where cultural understandings of an intimate sort are somewhat lacking among the members of a physical group it is felt to be important that the lack be made good by a constant supply of small talk. This caressing or reassuring quality of speech in general, even where no one has anything of moment to communicate, reminds us how much more language is than a mere technique of communication. Nothing better shows how completely the life of man as an animal made over by culture is dominated by the verbal substitutes for the physical world.

The use of language in cultural accumulation and historical transmission is obvious and important. This applies not only to sophisticated levels but to primitive ones as well. A great deal of the cultural stock in trade of a primitive society is presented in a more or less well defined linguistic form. Proverbs, medicine formulae, standardized prayers, folk tales, standardized speeches, song texts, genealogies, are

some of the more overt forms which language takes as a culture preserving instrument. The pragmatic ideal of education, which aims to reduce the influence of standardized lore to a minimum and to get the individual to educate himself through as direct a contact as possible with the facts of his environment, is certainly not realized among the primitives, who are often as word bound as the humanistic tradition itself. Few cultures perhaps have gone to the length of the classical Chinese culture or of rabbinical Jewish culture in making the word do duty for the thing or the personal experience as the ultimate unit of reality. Modern civilization as a whole, with its schools, its libraries and its endless stores of knowledge, opinion and sentiment stored up in verbalized form, would be unthinkable without language made eternal as document. On the whole, we probably tend to exaggerate the differences between "high" and "low" cultures or saturated and emergent cultures in the matter of traditionally conserved verbal authority. The enormous differences that seem to exist are rather differences in the outward form and content of the cultures themselves than in the psychological relation which obtains between the individual and his culture.

In spite of the fact that language acts as a socializing and uniformizing force it is at the same time the most potent single known factor for the growth of individuality. The fundamental quality of one's voice, the phonetic patterns of speech, the speed and relative smoothness of articulation, the length and build of the sentences, the character and range of the vocabulary, the stylistic consistency of the words used, the readiness with which words respond to the requirements of the social environment, in particular the suitability of one's language to the language habits of the person addressed—all these are so many complex indicators of the personality. "Actions speak louder than words" may be an excellent maxim from the pragmatic point of view but betrays little insight into the nature of speech. The language habits of people are by no means irrelevant as unconscious indicators of the more important traits of their personalities, and the folk is psychologically wiser than the adage in paying a great deal of attention willingly or not to the psychological significance of a man's language. The normal person is never convinced by the mere content of speech but is very sensitive to many of the implications of language behavior, however feebly (if at all) these may have been consciously analyzed. All

in all, it is not too much to say that one of the really important functions of language is to be constantly declaring to society the psychological place held by all of its members. Besides this more general type of personality expression or fulfilment there is to be kept in mind the important role which language plays as a substitutive means of expression for those individuals who have a greater than normal difficulty in adjusting themselves to the environment in terms of primary action patterns. Even in the most primitive cultures the strategic word is likely to be more powerful than the direct blow. It is unwise to speak too blithely of "mere" words, for to do so may be to imperil the value and perhaps the very existence of civilization and personality.

The languages of the world may be classified either structurally or genetically. An adequate structural analysis is an intricate matter and no classification seems to have been suggested which does justice to the bewildering variety of known forms. It is useful to recognize three distinct criteria of classification: the relative degree of synthesis or elaboration of the words of the language; the degree to which the various parts of a word are welded together; and the extent to which the fundamental relational concepts of the language are directly expressed as such. As regards synthesis languages range all the way from the isolating type, in which the single word is essentially unanalyzable, to the type represented by many American Indian languages, in which the single word is functionally often the equivalent of a sentence with many concrete references that would in most languages require the use of a number of words. Four stages of synthesis may be conveniently recognized; the isolating type, the weakly synthetic type, the fully synthetic type and the polysynthetic type. The classical example of the first type is Chinese, which does not allow the words of the language to be modified by internal changes or the addition of prefixed or suffixed elements to express such concepts as those of number, tense, mode, case relation and the like. This seems to be one of the more uncommon types of language and is best represented by a number of languages in eastern Asia. Besides Chinese itself Siamese, Burmese, modern Tibetan, Annamite and Khmer, or Cambodian, may be given as examples. The older view, which regarded such languages as representing a peculiarly primitive stage in the evolution of language, may now be dismissed as antiquated. All evidence points to the contrary hypothesis that

such languages are the logically extreme analytic developments of more synthetic languages which because of processes of phonetic disintegration have had to reexpress by analytical means combinations of ideas originally expressed within the framework of the single word. The weakly synthetic type of language is best represented by the most familiar modern languages of Europe, such as English, French, Spanish, Italian, German, Dutch and Danish. Such languages modify words to some extent but have only a moderate formal elaboration of the word. The plural formations of English and French, for instance, are relatively simple and the tense and modal systems of all the languages of this type tend to use analytic methods as supplementary to the older synthetic one. The third group of languages is represented by such languages as Arabic and earlier Indo-European languages, like Sanskrit, Latin and Greek. These are all languages of great formal complexity, in which classificatory ideas, such as sex gender, number, case relations, tense and mood, are expressed with considerable nicety and in a great variety of ways. Because of the rich formal implications of the single word the sentence tends not to be so highly energized and ordered as in the first mentioned types. Lastly, the polysynthetic languages add to the formal complexity of the treatment of fundamental relational ideas the power to arrange a number of logically distinct, concrete ideas into an ordered whole within the confines of a single word. Eskimo and Algonquin are classical examples of this type.

From the standpoint of the mechanical cohesiveness with which the elements of words are united languages may be conveniently grouped into four types. The first of these, in which there is no such process of combination, is the isolating type already referred to. To the second group of languages belong all those in which the word can be adequately analyzed into a mechanical sum of elements, each of which has its more or less clearly established meaning and each of which is regularly used in all other words into which the associated notion enters. These are the so-called agglutinative languages. The majority of languages seem to use the agglutinative technique, which has the great advantage of combining logical analysis with economy of means. The Altaic languages, of which Turkish is a good example, and the Bantu languages of Africa are agglutinative in form. In the third type, the so-called inflective languages, the degree of union between the radical element or

stem of the word and the modifying prefixes or suffixes is greater than in the agglutinative languages, so that it becomes difficult in many cases to isolate the stem and set it off against the accreted elements. More important than this, however, is the fact that there is less of a one to one correspondence between the linguistic element and the notion referred to than in the agglutinative languages. In Latin, for instance, the notion of plurality is expressed in a great variety of ways which seem to have little phonetic connection with each other. For example, the final vowel or diphthong of *equi* (horses), *dona* (gifts), *mensae* (tables) and the final vowel and consonant of *hostes* (enemies) are functionally equivalent elements the distribution of which is dependent on purely formal and historical factors that have no logical relevance. Furthermore in the verb the notion of plurality is quite differently expressed, as in the last two consonants of *amant* (they love). It used to be fashionable to contrast in a favorable sense the "chemical" qualities of such inflective languages as Latin and Greek with the soberly mechanical quality of such languages as Turkish. But these evaluations may now be dismissed as antiquated and subjective. They were obviously due to the fact that scholars who wrote in English, French and German were not above rationalizing the linguistic structures with which they were most familiar into a position of ideal advantage. As an offshoot of the inflective languages may be considered a fourth group, those in which the processes of welding, due to the operation of complex phonetic laws, have gone so far as to result in the creation of patterns of internal change of the nuclear elements of speech. Such familiar English examples as the words sing, sang, sung, song will serve to give some idea of the nature of these structures, which may be termed symbolistic. The kinds of internal change which may be recognized are changes in vocalic quality, changes in consonants, changes in quantity, various types of reduplication or repetition, changes in stress accent and, as in Chinese and many African languages, changes in pitch. The classical example of this type of language is Arabic, in which as in the other Semitic languages nuclear meanings are expressed by sequences of consonants, which have, however, to be connected by significant vowels whose sequence patterns establish fixed functions independent of the meanings conveyed by the consonantal framework.

Elaboration and technique of word analysis

are perhaps of less logical and psychological significance than the selection and treatment of fundamental relational concepts for grammatical treatment. It would be very difficult, however, to devise a satisfactory conceptual classification of languages because of the extraordinary diversity of the concepts and classifications of ideas which are illustrated in linguistic form. In the Indo-European and Semitic languages, for instance, noun classification on the basis of gender is a vital principle of structure; but in most of the other languages of the world this principle is absent, although other methods of noun classification are found. Again, tense or case relations may be formally important in one language, for example, Latin, but of relatively little grammatical importance in another, although the logical references implied by such forms must naturally be taken care of in the economy of the language, as, for instance, by the use of specific words within the framework of the sentence. Perhaps the most fundamental conceptual basis of classification is that of the expression of fundamental syntactic relations as such versus their expression in necessary combination with notions of a concrete order. In Latin, for example, the notion of the subject of a predicate is never purely expressed in a formal sense, because there is no distinctive symbol for this relation. It is impossible to render it without at the same time defining the number and gender of the subject of the sentence. There are languages, however, in which syntactic relations are expressed purely, without admixture of implications of a non-relational sort. We may speak therefore of pure relational languages as contrasted with mixed relational languages. Most of the languages with which we are familiar belong to the latter category. It goes without saying that such a conceptual classification has no direct relation to the other two types of classification which we have mentioned.

The genetic classification of languages is one which attempts to arrange the languages of the world in groups and subgroups in accordance with the main lines of historical connection, which can be worked out on the basis either of documentary evidence or of a careful comparison of the languages studied. Because of the far reaching effect of slow phonetic changes and of other causes languages which were originally nothing but dialects of the same form of speech have diverged so widely that it is not apparent that they are but specialized developments of a single prototype. An enormous amount of work

has been done in the genetic classification and subclassification of the languages of the world, but very many problems still await research and solution. At the present time it is known definitely that there are certain very large linguistic groups, or families, as they are often called, the members of which may, roughly speaking, be looked upon as lineally descended from languages which can be theoretically reconstructed in their main phonetic and structural outlines. It is obvious, however, that languages may so diverge as to leave little trace of their original relationship. It is therefore very dangerous to assume that languages are not at last analysis divergent members of a single genetic group merely because the evidence is negative. The only contrast that is legitimate is between languages known to be historically related and languages not known to be so related. Languages known to be related cannot be legitimately contrasted with languages known not to be related.

Because of the fact that languages have differentiated at different rates and because of the important effects of cultural diffusion, which have brought it about that strategically placed languages, such as Arabic, Latin and English, have spread over large parts of the earth at the expense of others, very varied conditions are found to prevail in regard to the distribution of linguistic families. In Europe, for instance, there are only two linguistic families of importance represented today, the Indo-European languages and the Ugro-Finnic languages, of which Finnish and Hungarian are examples. The Basque dialects of southern France and northern Spain are the survivors of another and apparently isolated group. On the other hand, in aboriginal America the linguistic differentiation is extreme and a surprisingly large number of essentially unrelated linguistic families must be recognized. Some of the families occupy very small areas, while others, such as the Algonquin and the Athabaskan languages of North America, are spread over a large territory. The technique of establishing linguistic families and of working out the precise relationship of the languages included in these families is too difficult to be gone into here. It suffices to say that random word comparisons are of little importance. Experience shows that very precise phonetic relations can be worked out between the languages of a group and that on the whole fundamental morphological features tend to preserve themselves over exceedingly long periods of time. Thus modern Lithuanian is in structure, vocab-

ulary and, to a large extent, even phonemic pattern very much the kind of a language which must be assumed as the prototype for the Indo-European languages as a whole. In spite of the fact that structural classifications are in theory unrelated to genetic ones and in spite of the fact that languages can be shown to have influenced each other, not only in phonetics and vocabulary but also to an appreciable extent in structure, it is not often found that the languages of a genetic group exhibit utterly irreconcilable structures. Thus even English, which is one of the least conservative of Indo-European languages, has many far reaching points of structure in common with as remote a language as Sanskrit in contrast, say, to Basque or Finnish. Again, different as are Assyrian, modern Arabic and the Semitic languages of Abyssinia they exhibit numerous points of resemblance in phonetics, vocabulary and structure which set them off at once from, say, Turkish or the Negro languages of the Nile headwaters.

The complete rationale of linguistic change, involving as it does many of the most complex processes of psychology and sociology, has not yet been satisfactorily worked out, but there are a number of general processes that emerge with sufficient clarity. For practical purposes inherent changes may be distinguished from changes due to contact with other linguistic communities. There can be no hard line of division between these two groups of changes because every individual's language is a distinct psychological entity in itself, so that all inherent changes are likely at last analysis to be peculiarly remote or subtle forms of change due to contact. The distinction, however, has great practical value, all the more so as there is a tendency among anthropologists and sociologists to operate far too hastily with wholesale linguistic changes due to external ethnic and cultural influences. The enormous amount of study that has been lavished on the history of particular languages and groups of languages shows very clearly that the most powerful differentiating factors are not outside influences, as ordinarily understood, but rather the very slow but powerful unconscious changes in certain directions which seem to be implicit in the phonemic systems and morphologies of the languages themselves. These "drifts" are powerfully conditioned by unconscious formal feelings and are made necessary by the inability of human beings to actualize ideal patterns in a permanently set fashion.

Linguistic changes may be analyzed into pho-

netic changes, changes in form and changes in vocabulary. Of these the phonetic changes seem to be the most important and the most removed from direct observation. The factors which lead to these phonetic changes are probably exceedingly complex and no doubt include the operation of obscure symbolisms which define the relation of various age groups to one another. Not all phonetic changes, however, can be explained in terms of social symbolism. It seems that many of them are due to the operation of unconscious economies in actualizing sounds or combinations of sounds. The most impressive thing about internal phonetic change is its high degree of regularity. It is this regularity, whatever its ultimate cause, that is more responsible than any other single factor for the enviable degree of exactness which linguistics has attained as a historical discipline. Changes in grammatical form often follow in the wake of destructive phonetic changes. In many cases it can be seen how irregularities produced by the disintegrating effect of phonetic change are ironed out by the analogical spread of more regular forms. The cumulative effect of these corrective changes is quite sensibly to modify the structure of the language in many details and sometimes even in its fundamental features. Changes in vocabulary are due to a great variety of causes, most of which are of a cultural rather than of a strictly linguistic nature. The too frequent use of a word, for instance, may reduce it to a commonplace term, so that it needs to be replaced by a new word. On the other hand, changes of attitude may make certain words with their traditional overtones of meaning unacceptable to the younger generation, so that they tend to become obsolete. Probably the most important single source of change in vocabulary is the creation of new words on analogies which have spread from a few specific words.

Of the linguistic changes due to the more obvious types of contact the one which seems to have played the most important part in the history of language is the "borrowing" of words across linguistic frontiers. This borrowing naturally goes hand in hand with cultural diffusion. An analysis of the provenience of the words of a given language is frequently an important index of the direction of cultural influence. Our English vocabulary, for instance, is very richly stratified in a cultural sense. The various layers of early Latin, mediaeval French, humanistic Latin and Greek and modern French borrowings constitute a fairly accurate gauge of the

time, extent and nature of the various foreign cultural influences which have helped to mold English civilization. The notable lack of German loan words in English until a very recent period, as contrasted with the large number of Italian words which were adopted at the time of the Renaissance and later, is again a historically significant fact. By the diffusion of culturally important words, such as those referring to art, literature, the church, military affairs, sport and business, there have grown up important transnational vocabularies which do something to combat the isolating effect of the large number of languages which are still spoken in the modern world. Such borrowings have taken place in all directions, but the number of truly important source languages is surprisingly small. Among the more important of them are Chinese, which has saturated the vocabularies of Korean, Japanese and Annamite; Sanskrit, whose influence on the cultural vocabulary of central Asia, India and Indo-China has been enormous; Arabic, Greek, Latin and French. English, Spanish and Italian have also been of great importance as agencies of cultural transmission, but their influence seems less far reaching than that of the languages mentioned above. The cultural influence of a language is not always in direct proportion to its intrinsic literary interest or to the cultural place which its speakers have held in the history of the world. For example, while Hebrew is the carrier of a peculiarly significant culture, actually it has not had as important an influence on other languages of Asia as Aramaic, a sister language of the Semitic stock.

The phonetic influence exerted by a foreign language may be very considerable, and there is a great deal of evidence to show that dialectic peculiarities have often originated as a result of the unconscious transfer of phonetic habits from the language in which one was brought up to that which has been adopted later in life. Apart, however, from such complete changes in speech is the remarkable fact that distinctive phonetic features tend to be distributed over wide areas regardless of the vocabularies and structures of the languages involved. One of the most striking examples of this type of distribution is found among the Indian languages of the Pacific coast of California, Oregon, Washington, British Columbia and southern Alaska. Here are a large number of absolutely distinct languages, belonging to a number of genetically unrelated stocks, so far as we are able to tell, which nevertheless have many important and distinctive

phonetic features in common. An analogous fact is the distribution of certain peculiar phonetic features in both the Slavic languages and the Ugro-Finnic languages, which are unrelated to them. Such processes of phonetic diffusion must be due to the influence exerted by bilingual speakers, who act as unconscious agents for the spread of phonetic habits over wide areas. Primitive man is not isolated, and bilingualism is probably as important a factor in the contact of primitive groups as it is on more sophisticated levels.

Opinions differ as to the importance of the purely morphological influence exerted by one language on another in contrast with the more external types of phonetic and lexical influence. Undoubtedly such influences must be taken into account, but so far they have not been shown to operate on any great scale. In spite of the centuries of contact, for instance, between Semitic and Indo-European languages we know of no language which is definitely a blend of the structures of these two stocks. Similarly, while Japanese is flooded with Chinese loan words, there seems to be no structural influence of the latter on the former. A type of influence which is neither one of vocabulary nor of linguistic form, in the ordinary sense of the word, and to which insufficient attention has so far been called, is that of meaning pattern. It is a remarkable fact of modern European culture, for instance, that while the actual terms used for certain ideas vary enormously from language to language, the range of significance of these equivalent terms tends to be very similar, so that to a large extent the vocabulary of one language tends to be a psychological and cultural translation of the vocabulary of another. A simple example of this sort would be the translation of such terms as *Your Excellency* to equivalent but etymologically unrelated terms in Russian. Another instance of this kind would be the interesting parallelism in nomenclature between the kinship terms of affinity in English, French and German. Such terms as *mother-in-law*, *belle-mère* and *Schwiegermutter* are not, strictly speaking, equivalent either as to etymology or literal meaning but they are patterned in exactly the same manner. Thus *mother-in-law* and *father-in-law* are parallel in nomenclature to *belle-mère* and *beau-père* and to *Schwiegermutter* and *Schwiegervater*. These terms clearly illustrate the diffusion of a lexical pattern which in turn probably expresses a growing feeling of the sentimental equivalence of blood relatives and relatives by marriage.

The importance of language as a whole for the definition, expression and transmission of culture is undoubted. The relevance of linguistic details, in both content and form, for the profounder understanding of culture is also clear. It does not follow, however, that there is a simple correspondence between the form of a language and the form of the culture of those who speak it. The tendency to see linguistic categories as directly expressive of overt cultural outlines, which seems to have come into fashion among certain sociologists and anthropologists, should be resisted as in no way warranted by the actual facts. There is no general correlation between cultural type and linguistic structure. So far as can be seen, isolating or agglutinative or inflective types of speech are possible on any level of civilization. Nor does the presence or absence of grammatical gender, for example, seem to have any relevance for the understanding of the social organization or religion or folklore of the associated peoples. If there were any such parallelism as has sometimes been maintained, it would be quite impossible to understand the rapidity with which culture diffuses in spite of profound linguistic differences between the borrowing and giving communities. The cultural significance of linguistic form, in other words, lies on a much more submerged level than on the overt one of definite cultural pattern. It is only very rarely, as a matter of fact, that it can be pointed out how a cultural trait has had some influence on the fundamental structure of a language. To a certain extent this lack of correspondence may be due to the fact that linguistic changes do not proceed at the same rate as most cultural changes, which are on the whole far more rapid. Short of yielding to another language which takes its place, linguistic organization, largely because it is unconscious, tends to maintain itself indefinitely and does not allow its fundamental formal categories to be seriously influenced by changing cultural needs. If the forms of culture and language were then in complete correspondence with one another, the nature of the processes making for linguistic and cultural changes respectively would soon bring about a lack of necessary correspondence. This is exactly what is found to be the case. Logically it is indefensible that the masculine, feminine and neuter genders of German and Russian should be allowed to continue their sway in the modern world; but any intellectual attempt to weed out these unnecessary genders would obviously be fruitless, for the

normal speaker does not actually feel the clash which the logician requires.

It is another matter when we pass from general form to the detailed content of a language. Vocabulary is a very sensitive index of the culture of a people and changes of meaning, loss of old words, the creation and borrowing of new ones are all dependent on the history of culture itself. Languages differ widely in the nature of their vocabularies. Distinctions which seem inevitable to us may be utterly ignored in languages which reflect an entirely different type of culture, while these in turn insist on distinctions which are all but unintelligible to us. Such differences of vocabulary go far beyond the names of cultural objects, such as arrow point, coat of armor or gunboat. They apply just as well to the mental world. It would be difficult in some languages, for instance, to express the distinction which we feel between "to kill" and "to murder" for the simple reason that the underlying legal philosophy which determines our use of these words does not seem natural to all societies. Abstract terms, which are so necessary to our thinking, may be infrequent in a language whose speakers formulate their behavior on more pragmatic lines. On the other hand, the question of the presence or absence of abstract nouns may be bound up with the fundamental form of the language; and there exist a large number of primitive languages whose structure allows of the very ready creation and use of abstract nouns of quality or action.

There are many language patterns of a special sort which are of interest to the social scientist. One of these is the tendency to create tabus for certain words or names. A very widespread custom among primitive peoples, for instance, is the tabu which is placed not only on the use of the name of a person recently deceased but of any word that is etymologically connected in the feeling of the speakers with such a name. This means that ideas have often to be expressed by circumlocutions or that terms must be borrowed from neighboring dialects. Sometimes certain names or words are too holy to be pronounced except under very special conditions, and curious patterns of behavior develop which are designed to prevent one from making use of such interdicted terms. An example of this is the Jewish custom of pronouncing the Hebrew name for God, not as Yahwe or Jehovah but as Adonai, My Lord. Such customs seem strange to us but equally strange to many primitive communities would be our extraordinary reluctance to pro-

nounce obscene words under normal social conditions. Another class of special linguistic phenomena is the use of esoteric language devices, such as passwords or technical terminologies for ceremonial attitudes or practises. Among the Eskimo, for example, the medicine man has a peculiar vocabulary which is not understood by those who are not members of his guild. Special dialectic forms or otherwise peculiar linguistic patterns are common among primitive peoples for the texts of songs. Sometimes, as in Melanesia, such song texts are due to the influence of neighboring dialects. This is strangely analogous to the practise among ourselves of singing songs in Italian, French or German rather than in English, and it is likely that the historical processes which have led to the parallel custom are of a similar nature. Thieves' jargons and secret languages of children may also be mentioned. These lead over into special sign and gesture languages, many of which are based directly on spoken or written speech; they seem to exist on many levels of culture. The sign language of the Plains Indians of North America arose in response to the need for some medium of communication between tribes speaking mutually unintelligible languages. Within the Christian church may be noted the elaboration of gesture languages by orders of monks vowed to silence. Not only a language or a terminology but the mere external form in which it is written may become important as a symbol of sentimental or social distinction. Thus Croatian and Serbian are essentially the same language but they are presented in very different outward forms, the former being written in Latin characters, the latter in the Cyrillic character of the Greek Orthodox church. This external difference, associated with a difference of religion, has of course the important function of preventing people who speak closely related languages or dialects but who wish for reasons of sentiment not to confound themselves in a larger unity from becoming too keenly aware of how much they actually resemble each other.

The relation of language to nationalism and internationalism presents a number of interesting sociological problems. Anthropology makes a rigid distinction between ethnic units based on race, on culture and on language. It points out that these do not need to coincide in the least—that they do not, as a matter of fact, often coincide in reality. But with the increased emphasis on nationalism in modern times the question of the symbolic meaning of race and lan-

guage has taken on a new significance and, whatever the scientist may say, the layman is ever inclined to see culture, language and race as but different facets of a single social unity, which he tends in turn to identify with such a political entity as England or France or Germany. To point out, as the anthropologist easily can, that cultural distributions and nationalities override language and race groups does not end the matter for the sociologist, because he feels that the concept of nation or nationality must be integrally imaged by the non-analytical person as carrying with it the connotation, real or supposed, of both race and language. From this standpoint it really makes little difference whether history and anthropology support the popular identification of nationality, language and race. The important thing to hold on to is that a particular language tends to become the fitting expression of a self-conscious nationality and that such a group will construct for itself in spite of all that the physical anthropologist can do a race to which is to be attributed the mystic power of creating a language and a culture as twin expressions of its psychic peculiarities.

So far as language and race are concerned, it is true that the major races of man have tended in the past to be set off against each other by important differences of language. There is less point to this, however, than might be imagined, because the linguistic differentiations within any given race are just as far reaching as those which can be pointed out across racial lines, yet they do not at all correspond to subracial units. Even the major races are not always clearly sundered by language. This is notably the case with the Malayo-Polynesian languages, which are spoken by peoples as racially distinct as the Malays, the Polynesians and the Negroes of Melanesia. Not one of the great languages of modern man follows racial lines. French, for example, is spoken by a highly mixed population, which is largely Nordic in the north, Alpine in the center and Mediterranean in the south, each of these subraces being liberally represented in the rest of Europe.

While language differences have always been important symbols of cultural difference, it is only in comparatively recent times, with the exaggerated development of the ideal of the sovereign nation and with the resulting eagerness to discover linguistic symbols for this ideal of sovereignty, that language differences have taken on an implication of antagonism. In ancient

Rome and all through mediaeval Europe there were plenty of cultural differences running side by side with linguistic ones, and the political status of Roman citizen or the fact of adherence to the Roman Catholic church was of vastly greater significance as a symbol of the individual's place in the world than the language or dialect which he happened to speak. It is probably altogether incorrect to maintain that language differences are responsible for national antagonisms. It would seem to be much more reasonable to suppose that a political and national unit, once definitely formed, uses a prevailing language as a symbol of its identity, whence gradually emerges the peculiarly modern feeling that every language should properly be the expression of a distinctive nationality. In earlier times there seems to have been little systematic attempt to impose the language of a conquering people on the subject people, although it happened frequently as a result of the processes implicit in the spread of culture that such a conqueror's language was gradually taken over by the dispossessed population. Witness the spread of the Romance languages and of the modern Arabic dialects. On the other hand, it seems to have happened about as frequently that the conquering group was culturally and linguistically absorbed and that their own language disappeared without necessary danger to their privileged status. Thus foreign dynasties in China have always submitted to the superior culture of the Chinese and have taken on their language. In the same way the Moslem Moguls of India, while true to their religion, which was adopted by millions in northern India, made one of the Hindu vernaculars the basis of the great literary language of Moslem India, Hindustani. Definitely repressive attitudes toward the languages and dialects of subject peoples seem to be distinctive only of European political policy in comparatively recent times. The attempt of czarist Russia to stamp out Polish by forbidding its teaching in the schools and the similarly repressive policy of contemporary Italy in its attempt to wipe out German from the territory recently acquired from Austria are illuminating examples of the heightened emphasis on language as a symbol of political allegiance in the modern world.

To match these repressive measures there is the oft repeated attempt of minority groups to erect their language into the status of a fully accredited medium of cultural and literary expression. Many of these restored or semimanu-

factured languages have come in on the wave of resistance to exterior political or cultural hostility. Such are the Gaelic of Ireland, the Lithuanian of a recently created republic and the Hebrew of the Zionists. In other cases such languages have come in more peacefully because of a sentimental interest in local culture. Such are the modern Provençal of southern France, the Plattdeutsch of northern Germany, Frisian and the Norwegian *landsmaal*. It is doubtful whether these persistent attempts to make true culture languages of local dialects that have long ceased to be of primary literary importance can succeed in the long run. The failure of modern Provençal to hold its own and the very dubious success of Gaelic make it seem probable that following the recent tendency to resurrect minor languages will come a renewed leveling of speech more suitably expressing the internationalism which is slowly emerging.

The logical necessity of an international language in modern times is in strange contrast to the indifference and even opposition with which most people consider its possibility. The attempts so far made to solve this problem, of which Esperanto has probably had the greatest measure of practical success, have not affected more than a very small proportion of the people whose international interests and needs might have led to a desire for a simple and uniform means of international expression, at least for certain purposes. It is in the less important countries of Europe, such as Czechoslovakia, that Esperanto has been moderately successful, and for obvious reasons. The opposition to an international language has little logic or psychology in its favor. The supposed artificiality of such a language as Esperanto or of any of the equivalent languages that have been proposed has been absurdly exaggerated, for in sober truth there is practically nothing in these languages that is not taken from the common stock of words and forms which have gradually developed in Europe. Such an international language could of course have only the status of a secondary form of speech for distinctly limited purposes. Thus considered the learning of a constructed international language offers no further psychological problem than the learning of any other language which is acquired after childhood through the medium of books and with the conscious application of grammatical rules. The lack of interest in the international language problem in spite of the manifest need for one is an excellent example of how little logic or

intellectual necessity has to do with the acquirement of language habits. Even the acquiring of the barest smattering of a foreign national language is imaginatively equivalent to some measure of identification with a people or a culture. The purely instrumental value of such knowledge is frequently nil. Any consciously constructed international language has to deal with the great difficulty of not being felt to represent a distinctive people or culture. Hence the learning of it is of very little symbolic significance for the average person, who remains blind to the fact that such a language, easy and regular as it inevitably must be, would solve many of his educational and practical difficulties at a single blow. The future alone will tell whether the logical advantages and theoretical necessity of an international language can overcome the largely symbolic opposition which it has to meet. In any event it is at least conceivable that one of the great national languages of modern times, such as English or Spanish or Russian, may in due course find itself in the position of a de facto international language without any conscious attempt having been made to put it there.

EDWARD SAPIR

See: WRITING; COMMUNICATION; SYMBOLISM; CULTURE; ANTHROPOLOGY; RACE; NATIONALISM; DIALECT; ISOLATION; STANDARDIZATION; CIVILIZATION.

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the Science of Language, 2 vols. (7th ed. London 1873); Schmidt, W., *Die Sprachfamilien und Sprachenkreise der Erde* (Heidelberg 1926); Bloomfield, L., *An Introduction to the Study of Language* (New York 1914); Vossler, K., *Geist und Kultur in der Sprache* (Heidelberg 1925), tr. as *The Spirit of Language in Civilization* (London 1932); Meillet, A., *Les langues dans l'Europe nouvelle* (2nd ed. Paris 1928); Bally, Charles, *Le langage et la vie* (Paris 1926); Gardiner, Alan H., *The Theory of Speech and Language* (Oxford 1932).

LAO TZU. See TAOISM.

LAPLACE, MARQUIS DE, PIERRE SIMON (1749–1827), French mathematician. Laplace, famous for his nebular hypothesis and for his work in celestial mechanics, was among the first to call attention to the importance of the application of the calculus of probability to the moral sciences and to the study of social facts.

It was Laplace who at the end of the eighteenth century was responsible for giving to the mathematical science of chance the systematic unity which it had hitherto lacked. "On the whole, the Theory of Probability is more indebted to him than to any other mathematician" (Todhunter, p. 464). His great treatise, *La théorie analytique des probabilités* (Paris 1812, 3rd ed. 1820), which is even today the most complete work ever devoted to this branch of science, was the source of all subsequent developments. It united in a single body all the analytical methods which had been put forward since Pascal. Only a mathematician can appreciate the importance and the originality of the calculus of the generative functions which he invented for use in probability, completing and simplifying the algebraic methods elaborated by Euler and Lagrange, Taylor and Moivre. Laplace, however, considered the theory of probability as fundamentally merely "good sense reduced to calculation" and for this reason endeavored to present its principles and applications in a popular manner in his *Essai philosophique sur les probabilités* (5th ed. Paris 1825; tr. by F. W. Truscott and F. L. Emory, New York 1902), published in 1814 as the introduction to the second edition of the *Théorie analytique*. In this treatise he shows that the science of chance, founded on a very abstract philosophy and on the most subtle algebra, ought to be utilized in the future for legislation, economics, politics and the conduct of business; and he therefore studies the bearing of the science of probability on such subjects as the reliability of witnesses, the selections and decisions of assemblies, the judgments of tribunals, mortality

tables, average length of life, the proportion of masculine and feminine births, insurance, the profits of gambling establishments and the like. To all such questions one may apply within the limits of observed data the theorems on the "probability of causes," a subject in which Laplace was particularly interested.

The philosophic basis of probability, as expounded in this work and in the *Théorie analytique*, was that probability represented a subjective view of phenomena due to our mixture of ignorance and knowledge. Complete knowledge, Laplace held, would reveal a strict determinism in the universe and would make possible an exact prediction of the future. He did not, however, wait for the enunciation of strict deterministic laws in the social sciences before admitting them to the rank of positive sciences. He held that the method of probability constituted a method of positive knowledge and that in the social sciences as well as in the physical sciences there arise problems that can be approached only by the analysis of chance. Since about 1840 this interpretation of probability has been subject to attack, and a rival theory based on statistical frequency and on the more or less direct acceptance of objective chance has been developed by Cournot, Ellis, Venn and others. The criticism of Laplace's philosophy of probability does not, however, in any way detract from the value of his mathematical analysis or from his vision in applying the method of probability to a host of diverse problems both in the physical and in the social sciences.

MAURICE HALBWACHS

Works: *Oeuvres complètes de Laplace*, ed. by the Académie des Sciences Morales et Politiques, 14 vols. (Paris 1878–1912).

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LAPPO-DANILEVSKY, ALEXANDR SERGEYEVICH (1863–1919), Russian historian. Lappo-Danilevsky was professor at the University of St. Petersburg. He was first interested in archaeology but soon turned his attention to the study of the social development of Russia in the sixteenth and seventeenth centuries. Influenced

by Kluchevsky, he was one of the first to apply the sociological method to the study of Russian history. His principal work is a volume on the organization of direct taxation in the Moscow state in the seventeenth century (University of St. Petersburg, *Zapiski istoriko-filologicheskago fakulteta*, vol. xxiii, 1890), a subject to which he was attracted by the consideration of the role of the government in the integration of Russia during this period. He concluded that the fiscal organization of Muscovy was determined by the ever increasing needs of the militaristic and imperialistic state, which was the principal if not the only factor in shaping the economic and social development of the country. While admitting the existence in Russia of the primitive agrarian commune, which modern scholarship regards as very doubtful, he insisted that it was under fiscal pressure and particularly due to the land tax assessed on the basis of joint responsibility that the communes acquired a fixed structure and became administrative districts. In the course of this study he made for the first time systematic use of many unpublished documents, chief among which were the cadastral registers of the seventeenth century. He failed, however, in his attempt to reconstruct the origins of the Russian fiscal system and of Russian censuses and cadastral registers, because his study did not take sufficient account of the development of the preceding centuries and because he denied a priori any possibility of Byzantine influence. He frequently used his sources without first subjecting them to critical examination and thus committed many errors of interpretation, which are listed in Miliukov's authoritative study *Sporne voprosi v finansovoy istorii moskovskago gosudarstva* (Controversial questions in the financial history of Muscovy, St. Petersburg 1892). Another great work by Lappo-Danilevsky, a study of the process of adscription of peasants to the soil in the sixteenth and seventeenth centuries (Imperial Academy of Sciences, St. Petersburg, *Zapiski po istoriko-filologicheskomu otdeleniu*, vol. v, 1901, p. 51-175), also based on rich and hitherto unused documents, is a confirmation of Kluchevsky's views on the subject, according to which the de facto adscription caused by the inability of the free tenants to discharge their debts to the landlords received legal sanction from the government. In his theoretical work *Metodologiya istorii* (Methodology of history, 2 vols., St. Petersburg 1910-13; new ed. of vol. i, Petrograd 1923) Lappo-Danilevsky developed Rickert's ideas concerning history as "ideog-

raphy" and endeavored to prove further that it is as exact a discipline as the natural sciences.

PETER BIZILLI

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LARGE NUMBERS, LAW OF. *See* PROBABILITY; STATISTICS.

LARGE SCALE PRODUCTION like most terms used and useful in economic analysis signifies nothing very definite. Neither in extensive scope (field of application) nor in intensive measure (degree of size) is it restricted in use by reference to any conventional standards or limits. The phrase was first employed principally in connection with manufacturing operations to describe loosely the transformation wrought by the abandonment of handicraft methods and the development of the machine technique in the volume of goods passing through a particular process under a common direction or management. But the linking up or integration of numerous successive processes under a single proprietary control and the growth of the variety of products turned out by a single productive organization—changes which, the first always and the second latterly, have frequently accompanied or grown out of the transformation described—are difficult to distinguish from the first sort of transformation in their effects upon the structure of industry, and in practise they have not been sharply excluded from the concept of large scale production. Moreover the increasing scale of organization characteristic of economic effort in so many different fields, where there may or may not be a significant application of the machine technique, is a phenomenon for which the term large scale production seemed sufficiently appropriate, doubtless largely by way of analogy, to justify general adoption. Thus banking, insurance, mining, construction, retail trade and even agriculture in some of its branches may be said to participate in the movement toward large scale production.

In the broad sense in which the phrase is now used it may be taken to signify simply a tendency toward the conduct of economic functions, with particular emphasis on their productive aspects in so far as these may be segregated, in

aggregates or units of organization which are large as compared with previous practise. Correlative to this integrative tendency is an increasing separation both geographically and functionally, first, of the producers and consumers of particular goods and services; secondly, of the various producers cooperating in the production of particular goods and services; and, finally, of the producers (as aggregate groups) of various goods and services. In a word, large scale production although it signifies primarily an increase in productive specialization is inseparably bound up with an increasing range of economic interdependence not only within each specific productive process but also throughout the whole economy or economic structure of a society.

The sources of a socio-economic transformation so complex and so profound are not easy to trace. It will suffice here to call attention to two major lines of interpretation or modes of approach to the problem. Foremost in prestige if not in time or in number of adherents is the group of theories which finds the primal root from which large scale production sprang, and from which its growth is still sustained, in the expanding scope of market relationships; that is, in commercial considerations. Adam Smith gave wide currency to this theory by his cogent demonstration of the thesis that "the division of labor is limited by the extent of the market." The other school of interpretation finds the impetus toward large scale operations in technological factors. Karl Marx gave special prominence to the exigencies of the machine technique in dictating an increasing aggregation of productive resources under unified management, going so far indeed as to postulate the eventual complete absorption of all productive operations in society in a single organization. Those who think with him in this respect—and they are legion, although many are not conscious of his influence—have rested their case more upon the persuasive power of past events (the eighteenth and nineteenth century industrial revolution) and less upon the appeal of a prospective glorious consummation. As they see it, it is the economic advantages in production upon a large scale, permitting a more and more minute division of labor, which impel the growth of business units and the expansion of markets.

According to the first interpretation technological improvements are not excluded from the causal forces, but their chief significance in the promotion of large scale production is in their

bearing upon the facility of transportation and communication. At the same time room is reserved for the causal influence of such non-technical institutional factors as the conventional motives of enterprise, the legal policy toward trade, the scope of political organization, the growing density of population, the spread of education and indeed any factors which may affect the feasibility of carrying on regular exchange relationships over wide areas or among numerous persons. On the other hand, according to the second interpretation all such developments spring from and are but a reflection of the inexorable requirements of the machine technology. This is not the place to attempt a resolution of the fundamental issue. It may be observed that in the main the economic historians incline toward the first interpretation, notably Cunningham, Bücher, Schmoller, Sombart and in America N. S. B. Gras, A. P. Usher and V. S. Clark. Difficulties attach to an unqualified acceptance of either interpretation. The Marxian view is confronted at the outset with the indubitable fact that large scale production and a considerable division of labor tasks, although not previously prevalent characteristics, did precede the introduction of either automatic or power driven machinery. In England sporadic and yet far from insignificant experiments in this direction, particularly in the woolen industry, began as early as the middle of the sixteenth century. In France under Colbert there were established in the pottery and decorative fabric industries factories which have continued operations to this day. In America throughout the colonial period and well into the nineteenth century it was the glass industry which afforded perhaps the most conspicuous example of capitalistic organization, large scale employment, division of labor and production for remote markets; yet this was one of the very last fields of manufacture to be invaded by the machine technique, no important mechanical devices having been introduced prior to the twentieth century. Again, in reference to the extension of large scale production into such fields as banking and retail merchandising, the technological interpretation of the development falls somewhat short of conclusiveness. On the other hand, the Smithian view has somehow to contrive an explanation of the fact that power driven machinery was first used in manufactures and had already led to a substantial increase in the scale of productive operations, notably in the cotton textile industry (both in England and

in America) during the early decades of the nineteenth century, prior to the application of the machine technique in transportation or communication.

Those who lay primary emphasis upon the commercial factor also encounter a stumbling block in the case of agriculture. There despite world wide markets for the staple products: wheat, cotton, coffee, tobacco—markets moreover which were among the first to feel the influence of improved transportation—the productive units have remained typically small. There has been no significant change in the average size of farms in the United States, for example, since the Civil War. And although Brazilian coffee plantations and East Indian rubber plantations were for a long time fields for foreign capital investment on a large scale, there is evidence that the average size of holdings has recently diminished in both fields. It may well be that these simple averages obscure significant trends in opposite directions, tending to counterbalance one another; as, for example, the decline in the western part of the United States of the extensive "farms," which were primarily livestock ranches, and the growth in the eastern districts of small truck, poultry and dairy farms as against some increase in the size of cultivated holdings in the "dry farming" and one-crop areas. But the fact remains, as examination of the detailed census data will show, that large scale "corporation" farming has made no appreciable progress in America and that elsewhere agricultural units of similar size have been maintained only by virtue of some special legal circumstance, as of land tenure, colonial policy or "kulak liquidation" measures. Indeed it would appear that large scale production is profitable in agriculture only where there is virgin soil to be exploited, that cropping for the market leads inevitably to overproduction and disorganization and that the most efficient size of agricultural unit may be considerably smaller than is generally realized.

Whatever the causes of the movement toward large scale production, there is general agreement that it has been accompanied by substantial economic advantages, although not without offsetting drawbacks both from the social standpoint and from the standpoint of those who have been primarily involved in the development. The chief advantages from either view may all be subsumed under one heading: a reduction of costs. In economic theory the discussion of the relative costs of large scale pro-

duction has been closely bound up with the analysis of increasing returns (*q.v.*) and the theory of monopoly (*q.v.*). The classic statement and solution of the problem was that of Alfred Marshall (*Principles of Economics and Industry and Trade*). Since the World War theoretic analysis has been increasingly supplemented by statistical study of the relation of size to profits and to stability, while emphasis has shifted from the advantages of large scale production to its limitations.

For the purpose of analyzing the so-called economies of large scale production it is helpful to distinguish three aspects of the movement: large scale output, large scale ownership and large scale control. These three phases of the development may or may not coexist in the growth of any particular productive unit and also may or may not be coeval. It is quite possible to have a substantial enlargement in any one respect without either of the others being affected, although commonly a change in one direction is accompanied by corresponding if not equal change in each of the others. But the influences directly responsible for an enlargement of the productive unit in each of these respects, as well as the immediate consequences of such enlargement, are quite different from those acting upon the others or following from them, and the analysis may therefore proceed *seriatim*.

Large scale output from a single plant, especially in manufacturing, seems to derive its major advantages from an application in one way or another of the machine technique. By this is understood the technique based upon the complementary principles of specialization and coordination. It involves breaking up a whole productive process into its constituent elements and simultaneously reintegrating them into a thus diversified whole. At every stage the advantages gained from this procedure pertain to the economy resulting from continuous utilization of productive resources of all sorts, including human effort. But if each unit of productive resources engaged, of whatever species, is to be kept continuously functioning, if waste of potential productive time is to be minimized, two things are necessary. In the first place, each productive unit must be confined or reduced to a narrow range of operations functionwise, if not to a single task, in order to avoid the necessity of repeated stopping, shifting and starting with resultant time losses. In the second place, to keep each productive unit fully occupied at

a single operation or at least stage of the productive process necessitates the continuous movement of large masses of materials through a number of these successive specialized operations or stages. And this clearly implies not only a rigorous coordination of the operations in the successive stages of the process but also large scale output.

These advantages and their conditioning factors may be illustrated by the development of the shoe industry in America. In what has been called the home stage of industrial organization, as in pioneer households, where shoes were made by families for their own use from materials they had themselves provided and prepared, the losses—from a strictly cost point of view—in time and in material were bound to be substantial; the unfamiliar tasks of cutting and sewing leather were undertaken only occasionally, by inexperienced hands; the appropriate tools, simple though they were, lay idle most of the year; and indeed each particular tool was idle during most of the shoemaking process. Manifestly a real saving resulted from the introduction of a large scale output in the handicraft stage of organization, with the specialization of itinerant shoemakers, or cordwainers, going from home to home to make up a season's supply of footwear for each family from leather provided by the consumer. But the time loss of the artisan in moving from place to place and shifting from task to task was still inordinately large and remained even after the increasing density of population in the eastern sections of the country during the eighteenth century permitted him to settle down to custom work in his own shop.

A still larger scale of output could be achieved, however, and these losses reduced when such operations as measuring, fitting, selection and cutting of the leather, selling and the like could be separated from the actual shoemaking process and given over to other specialized hands. This was what happened with the development of the domestic, or "putting-out," system of industrial organization dominated by the merchant capitalist in the early years of the nineteenth century. Under this system still greater specialization was gradually realized: to a certain proportion of the artisans was assigned the cutting, to another group the sewing of the uppers and to still another the lasting, welting and finishing operations.

But the time losses resulting from distributing and collecting materials among numerous small scale productive units even in a single locality

as well as from the imperfect coordination of the speed of the work and the material losses resulting from the want of immediate oversight of the workers led eventually to the introduction of the factory system. This came in America only after the middle of the nineteenth century. It is significant that it followed closely on the invention of the sewing machine. So long as the economies realizable from an output larger in scale than that made possible by the domestic system were confined to the savings in human effort and to the savings in materials expense from a closer supervision of the accuracy and quality of the work and from a reduction of the investment in goods in process per unit of output, the preference of artisans for a self-regulated working day—their reluctance to submit to the rigid discipline of factory employment—might effectually have blocked the efforts of capitalist enterprisers to reduce their costs and increase their volume. But with the prospect of great savings even in the single process of sewing the uppers by machine shoe manufacturers were indisposed to let the prospective gains slip through their fingers as a result of merely partial utilization of the expensive equipment. And whether the equipment was leased to domestic workers or acquired and kept by them in their shops or homes (both arrangements were actually experimented with), the laxity of the discipline and the poor coordination of the work in the various stages of the manufacturing process made the full utilization of the potential productive capacity of the machines impossible. When added to this the advantages of using mechanical power to run the machines and the economy in the generation and transmission of power for multiple units became evident, shoe manufacture by handicraft processes under the domestic system was doomed to a speedy decline.

It is significant that the transformation of shoemaking to a factory industry came only after large sections of the country had been linked together commercially by the steam railroad. Finally, it is significant also in the same connection that the beginning of what is now commonly termed large scale production (or, more accurately, large scale output) awaited the insistent urge supplied by large orders of standardized shoes for prompt delivery occasioned by the Civil War.

The theory underlying the practical development of large scale output may be succinctly stated. Given the demand, if a method of production is to be introduced and to maintain itself

it must be more efficient than the method currently practised. To be more efficient it must yield a higher ratio of output to input; that is, secure a maximum utilization of a minimum of production resources. If it is to secure such utilization it must specialize each unit of every productive resource engaged and assure its continuous functioning in that single operation by keeping it supplied with an uninterrupted flow of "work" (materials and power) through a rigidly disciplined coordination of all phases of the productive process. In a word, efficiency in manufacture requires the machine technique.

This technique may manifest itself in a single manual operation: the time study, instruction cards and work charts of scientific management; in a mechanical device: the frame, gears, levers, cutting tools, jigs of a compound drill, for example, designed by an engineer; in a factory: the segregation of tasks, departmentalization, classical "division of labor," superintended by a works manager; in an industry: the cultivation of wheat, its shipment, its grading and storing, flour milling, bread baking and retail distribution all systematized by market contracts; or in a national economy: specialized industries such as hat making, shoe manufacture, automobile production, coal mining, coordinated through the markets. But on whatever plane it manifests itself, its inevitable accompaniment is standardization. Repetitive operations at every stage and on every plane can proceed without halting, adjustment and resultant waste only to the extent that each succeeding performance of each productive unit is identical with the preceding one. And such uniformity can be achieved only when standardized materials are to be worked up according to standardized specifications. Wherever human judgment intervenes, the machine technique is superseded. Whether from necessity, as in cases where materials are incapable of standardization or processes are dependent upon meteorological conditions, or from choice, as where the tastes of consumers result in a fickle demand, the intervention of judgment spells the interruption of repetition and the limitation of efficiency.

This is not to say that the limitations upon the application of the machine technique and the development of productive efficiency—limitations which restrict the growth of large scale output—are ipso facto uneconomical. Efficiency is a purely technical matter: the ratio of output to input. Economy is a matter of value: the ratio of value realized to value expended, of product

to cost. It may very well be therefore that efficiency might be indefinitely improved by the extension of large scale output (application of the machine technique), while economy might be sacrificed (with resultant "waste" although not "loss" of productive factors) by the extension of large scale output beyond a given point in any particular line of production. Such indeed appears to be the actual situation.

The scale of output in any industry which will provide for a comparatively full utilization of each unit of every species of productive agent required depends in the first instance upon the capacity of that unit or complex of units at any stage or operation or in any department having the maximum potential output (analogous inversely to the weakest link in a chain). The productive units in other stages or departments will tend to be enlarged if need be by simple duplication of factors. But the very fact that for different processes or operations in an industry the "size" of the productive units varies means in practise that the facilities cannot be expanded piecemeal. Thus if in process A the output of a single productive unit for a given period be represented by 4 and in process D it be represented by 5, even though in all the remaining processes there might be outputs per unit equivalent to 1 or less, full utilization of all productive factors could not be achieved, obviously, short of a scale of output equivalent to 20 for every process. Substantial discrepancies of this sort between the capacities per productive unit per period in different processes may easily be a contributing if not a decisive factor leading to the separation of those necessitating the largest scale of operation and their organization as a distinct branch of industry.

Concretely, the particular productive processes in which the unit factors for practical reasons have had to be provided in relatively large "chunks" if they were to be provided at all economically appear to have been preeminently power generation and executive management. So long as waterfalls or steam engines were the most economical sources of industrial power, as generally the former were in the first half of the nineteenth century and the latter remained throughout the second half, the advantages in dependability and cost of large sized generating units together with the impracticability of transmitting kinetic energy over any considerable distance placed a heavy premium on large scale output in all the manufacturing processes in which power was required. Like-

wise the capacity of executive management which was adequate for even a small enterprise was adequate also for conducting the operations of a much larger aggregate of "cooperating" productive resources. The capacity here was chiefly a function of aptitude and experience, judgment and knowledge. The importance of this factor of fuller utilization of executive capacity is perhaps most patent in the development of the cotton textile industry in New England, where the names of Lowell, Slater, Sprague, Brown and Knight came to be synonymous with large and expanding operations. But the same factor is also evident in the rise of iron and steel manufacture from local forges and bloomeries to vast, integrated works comprising mining, furnace and rolling mill operations.

While these two types of so-called (but misnamed) fixed costs—productive factors, that is, the capacity of which tended persistently to outrun their effective utilization—have not provided the sole forces making for large scale output, being undoubtedly supplemented in some measure by the pressure of unutilized capacity from other sources, as, for example, in mere fabricating machines, they do appear to have been the most potent forces working in this direction in industry generally, at least throughout the nineteenth century. Whether they may be expected to continue to provide compelling impulsion in this direction is, however, another question. The development of electrical energy as a source of industrial power has brought about such a tremendous increase in the economical size of a power generating unit, especially with the advent of superpower systems, that it has already achieved a substantial divorce of this process from most branches of manufacturing industry. Increasingly industrial power is purchased in the form of electric current supplied from central stations, making possible the achievement of maximum utilization of other productive factors and minimum costs upon a much smaller scale of output in many of these branches of production than was heretofore considered possible. It is not inconceivable therefore on this account alone that the movement toward ever larger scale of output may have been arrested and even reversed. In reference to the "economies" gained from the fuller utilization of the capacities of executive management it may be noted that recent developments tending to segregate technological experimentation in industrial research institutes and in government and endowed scientific laboratories, as well as

the growth of independent and governmental statistical services furnishing more comprehensive and authentic trade information than any single productive enterprise whatever its size could hope to assemble, have clearly tended to reduce the "advantage of size."

There must also be noted the somewhat tenuous but none the less important distinction between mass production and large scale production. The latter term applies essentially to scale of organization, even when output and not ownership or control is the center of attention. Mass production, on the other hand, applies to the scale of operation; it usually refers to the production of one product or a very limited number under special conditions, involving the highest degree of standardization and continuous operation. In point of time, mass production has followed upon large scale production, of which indeed it may be considered a special phase. It is to be noted also that while large scale production has in general characterized the recent period of industrial evolution, mass production is and can be characteristic only of certain industries. For the most part and regarding essentials only, these industries appear to be characterized by two distinctive features. In the first place, the materials upon which they operate must be sufficiently homogeneous to be amenable to uniform treatment. Cement manufacture, and indeed most of the so-called "mill" industries, illustrate this feature most clearly; but even in such an industry as slaughtering and meat packing the units of raw material vary only within such limits as permit a standardized, continuous process of preparation. In the second place, and perhaps even more significantly, these mass production industries are dependent upon mass markets. What this means in substance is that the product must be one which, if not a "necessary" according to an old and outmoded economic classification, is salable at a price which brings it within the reach directly, as in the case of meat and even certain types of automobiles, or indirectly, as in the case of cement and tin cans, of a large section of the population. This circumstance makes the industries organized upon a mass production basis peculiarly vulnerable to trade dislocations. For while it is true that the output on a tremendous scale of one standardized product makes possible great reductions in unit cost, the economy, as distinct from the efficiency, of mass production is conditioned by the extent and the permanence of the market. A firm which produces a hand-

some profit when operating at full capacity may lose heavily when operating at 75 per cent or 60 per cent of its capacity. Recent studies seem to confirm the view that it is the mass production industries which tend to be most adversely affected by industrial crises. Indeed since mass production industries are generally dependent not only upon an extensive market but, because of their exceptional attractiveness during periods of prosperity, upon a growing market, it becomes questionable whether the movement of the reorganization of industry upon this basis has not already overreached itself, i.e. carried mass production past the point as well as beyond the field where its advantages outweighed its limitations even from a strictly profit seeking viewpoint.

It is significant that when allowance is made for all the variables affecting basis of enumeration, period of enumeration and the like, the returns of the Census of Manufactures in the United States indicate a distinct slowing down in the rate of growth of the average size of industrial "establishments" since the beginning of the present century. There are several difficulties in the way of statistical measurement of the growth of large scale output. The available measures are the figures in the census returns of most countries as to number of employees, capital investment and volume of output. The difficulty with the first measure is that it neglects entirely the industrial growth accompanying or taking place as a result of the introduction of labor saving devices. The accuracy of the second depends almost exclusively upon the judgment of the person making the return, since records of original investment are seldom complete and still more rarely reliable and even when they are both they are vitiated by secular and cyclical price movements. The difficulty with the third measure, except in the comparatively rare cases in which physical measurement is feasible and such data are recorded, is that it also uses an elastic measuring rod, the monetary unit. Furthermore as an index of changes in the scale of productive operations its dependability is weakened by the circumstance that census returns are taken only intermittently and that successive enumerations do not, save by chance, occur in identical phases of the business cycle. Despite its shortcomings therefore the first measure remains in general the most useful basis for a study of changes in the size of industrial establishments.

Without attempting to reproduce the figures

which tell the story of the growth of large scale output the outstanding historical facts may be summarized. The transformation had its inception in manufactures and in transport, was extended slowly in the primary extractive and milling industries—mining, lumbering, fisheries and agriculture—and has affected the organization of the distributive, entertainment and service trades only recently. It was first experienced in Great Britain, where its characteristic features and prevalent range of concentration in different fields were worked out roughly in the first half of the nineteenth century. It wrought a revolution in the industrial organization of America between 1860 and the turn of the century, having a time center of gravity around 1885. In Germany the change came somewhat later and rather more suddenly than in other similarly situated countries, between 1880 and the outbreak of the World War. In France the changes have perhaps been less extensive in scope, less striking in degree and less accelerated in tempo than in any other major industrial country.

It is in the United States that large scale production has developed most spectacularly. Here as elsewhere generally the textile industries were the first to exhibit the trend toward large scale output. In 1859 the average employment per establishment in cotton mills was 112, which indicated a larger average size of plant than was to be found in any other industry. Yet even at that time no mill in the country operated as many as 100,000 spindles, while a half century later the largest mill had 650,000 spindles. The hosiery, silk, carpet, woolen and worsted industries were also well above the general average of size in 1859, with employment per establishment respectively of 46, 39, 31, 33 and for the only three worsted mills enumerated the phenomenal average of 793. There was a steady trend upward in the size of textile mills during the next four decades, although the advance was less marked in the woolen industry and the hosiery trade than in other branches. Woolen mills and knitting mills barely doubled in average size, while carpet mills increased sevenfold, silk mills threefold and cotton mills nearly as much. But the most significant developments in the general movement were the displacement of the textile industries by the metal industries in the front rank of large scale operations and the spread of this type of organization to many other branches of industry. The average number of employees per establishment in iron and steel manufacture increased from 65 in 1859 to 333

in 1899, or more than fivefold. The largest steel-works in the country in 1860, the Great Bend Iron Works on the Allegheny, had four small blast furnaces and represented a total investment of \$1,000,000. By 1890 the largest steel plant had fourteen blast furnaces with an overall capacity at least twenty times greater than that of the Great Bend Works in 1860, and the whole plant represented an investment of \$25,000,000. Thereafter the growth in size of productive units in this industry was chiefly through horizontal and vertical combination and large scale ownership. In reference to the spread of the large scale output, machine technique, factory system movement in manufacturing generally, the census data are not directly instructive because of a misconceived basis, as well as faulty standards, of enumeration. But after suitable corrections and allowances are made it may be stated conservatively that the census authenticates an estimate of an increase between 1869 and 1899 in the average size of industrial establishments, measured by employees per establishment, of approximately 75 percent. When measured by the value-product per establishment, however, this increase in size amounted to roughly 150 percent, or double that shown by the employment measure. This reveals strikingly the extent of the mechanization tendency accompanying the factory movement. The census clearly indicates moreover that for manufacturing industry as a whole the movement had its most profound and pervasive effects during the two decades from 1870 to 1890 and by the latter date had substantially run its course. In other words, large scale output by the factory system had become characteristic of American industry by 1890, and the widespread consolidation movement of the ensuing decade and the present century did not on the whole vitally affect manufacturing methods or the productive organization of industry. The Census Bureau's special monograph, *The Integration of Industrial Operation*, a painstaking study of the data up to 1920, reached the following conclusion: "That there is, in general, some trend toward larger establishments must be expected, for new industries are growing rapidly which require large establishments for profitable operation, such as automobile, rubber-tire, beet-sugar, and electrical-apparatus enterprises. Since these and other similar industries are expanding at a much more rapid rate than the older industries they naturally tend to raise the general average for industry as a whole; but the census data cer-

tainly cannot be used to support the hypothesis that the tendency for industrial establishments since 1900 has been, in general, to increase in size. The rapid concentration, so evident in the nineteenth century, is by no means so marked in the twentieth" (*Census Monograph*, no. 3, 1924, p. 45). This conclusion requires no amendment for extension to the latest available reports of the Census of Manufactures, and it supports fully the judgment previously expressed that the movement toward large scale output in American industry was a phenomenon of the latter part of the nineteenth century.

The question arises as to the extent to which large scale production may be expected to spread to other parts of the world. In agriculture the plantation system gives indication of serious disabilities. Large scale output has thus far gained only a feeble hold in China and India, and the development of electrical power, as well as the tenacity of local habits, may prevent its spread. A recent report by an Italian government committee has stressed the advisability of small scale industry. On the other hand, Soviet Russia is committed to a program of large scale and, wherever possible, mass production, in agriculture as well as in industry. The first Five Year Plan was based upon the development of the heavy industries as a preparation for large scale output in all fields. Not only was no provision made for the continuance of the numerous household-craft and local-shop industries which in prerevolutionary Russia supplied a substantial if not a preponderant part of the output of fabricated commodities, but these forms of production were positively discouraged. There is some indication, however, latterly even in Russia, of a necessary abandonment of the goal of size and a recognition of the need for a certain decentralization of industry. Moreover this is partly on social but mainly on economic grounds.

Large scale ownership is the second phase of large scale production. In a way, it may be considered to have superseded large scale output, although as the growth of chain stores has demonstrated it is not contingent upon what is here denominated the prior phase. But speaking generally it is only after the advantages of large scale output in single plants have approached exhaustion that the combination of numerous more or less identical establishments under a single ownership offers alluring prospects for business enterprise. Theoretically an adequate explanation for this further development in the

hierarchy of "size" might appear to be afforded by the same reasoning as that which applies to the evolution of large scale output. Such an explanation would run in terms chiefly of the opportunity for fuller utilization of administrative capacity: a reduction of the bargaining horse-play per unit of aggregate product which occupies so much of the time of management when the scale of ownership is confined to the size of distinct operating units. Whether this extension of ownership takes the form of a simple aggregation of numerous substantially identical productive units (as, for example, the Woolworth chain stores) or of an integration of numerous productive units operating in successive stages of a single industrial process (such as the Ford organization) or of a vast congeries of productive units operating in a variety of industries (for example, the Stinnes concern and the Kreuger enterprises), there tends in any case to be an economizing of time and effort in the negotiation of contracts, the formulation of policies and the establishment of routine discipline. In short, the work of administration (per unit of product) tends to be minimized.

But the development of large scale ownership brings with it far more than this. It involves the opportunity for better coordination than the market mechanism affords. This is most evident perhaps when the large scale ownership takes the form of integration in the technical sense. It permits of definite planning and adjustment of the operations in each stage to the requirements of prior and succeeding stages. As German writers have been wont to insist, the organization of trusts cannot be ascribed solely to a desire for "control of the market" without taking account of the advantages of "independence of the market." But even in the case of the telephone industry, where essentially there is no question of technical integration, large scale ownership (a proprietary unification of numerous independent operating plants) facilitates a coordination of the services so superior to what might be achieved by the independent ownership and operation of each of the several "plants" as to be practically compulsory. This superior coordination is not simply a matter of standardization of operating equipment and practise, better adjustment of trunk line facilities to requirements and quicker "connections" between stations. It extends even to the planning for future growth of the plants as a whole and to the adjustment of the productive capacity of auxiliary or ancillary industries to their effective de-

mand. These are no less social than private advantages, it should be observed; and in some measure similar factors explain and similar consequences pertain to the organization of large scale proprietary units even in such industries as mercantile trade and banking.

The extension of large scale ownership even more than the growth of large scale output, however, appears to receive a substantial part of its impetus not only from non-technical factors but also from extra-economic factors. In a world in which achievement is measured mainly in pecuniary terms, in which wealth is the key to social esteem and in which business enterprise represents the accredited channel for the exhibition of personal prowess the ownership and (at least nominal) responsibility for the successful operation of a far flung chain of business ventures stamp a man as an "empire builder." There are no bounds to such an ambition. Pride and emulation impel men like Hugo Stinnes, Ivar Kreuger, Lord Melchett, Philip Armour and Henry Ford, not to mention lesser magnates like the Van Sweringens and Clarence Saunders, from one acquisition to another. The corporation device is peculiarly fitted to serve their ends: it permits the unification in their hands of an ever vaster fund of productive property than their own accumulations could generally hope to reach. Yet the corporate fortunes are popularly identified with their fortunes, and so they are spurred on toward an indefinite expansion. It is not surprising therefore that a movement propelled by such forces should so frequently end in disaster. The limits which human capacities set to the effective superintendence and smooth coordination of vast and heterogeneous properties are real and inescapable. Functional specialization of management may go a long way toward providing survival value for concerns as their proprietary interests grow larger and larger, but eventually this very specialization becomes a snare and a delusion. The virtues of size become in the end its worst vices.

Large scale control appears to have grown out of and, in the dynamic aspect of large scale production, to have of late superseded large scale ownership. Indeed the concentration of the discretionary power to determine the vital policies of numerous productive enterprises in the hands of others than their collective owners is clearly predicated upon the growth of the proprietary units to a size greater than that in which it is practicable for all of the "owners"

to participate in the formulation and execution of policies. In short, it is only when by force of circumstances control has been divorced from ownership that it can be effectually concentrated upon a large scale, enabling "size" thus to overreach the order of magnitude to which the exigencies of ownership persuasion and ownership responsibility confine it.

The advantages which furnish the motivation for the development of this species of concentration, for the extension of large scale production from the sphere of big business into the realm of high finance, are very infrequently referred to as "economies." This abandonment of traditional nomenclature doubtless has a sound basis in fact. But its adequate explanation calls also for some recognition of the surreptitious character of this phase of the development of large scale production. In most countries the evolution of industrial concentration upon this plane and in this degree is, at least as yet, without explicit legal sanction. This is not to say that it is regarded as illegal even in countries, like the United States, which remain committed to the policy of fostering rugged independence and forthright competition in trade. Rather the very novelty of the devices for achieving and exercising large scale control tends to stamp the movement with an extralegal character. Its sanctions rest in private interest rather than in settled public policy.

Large scale control appears to have sprung primarily from the quest for power and prestige instead of from the pursuit of either technical economies or commercial advantages. The existence of huge aggregates of capital nominally under a single ownership but actually owned by widely scattered corporate security holders offered a challenge to the will to mastery. The pyramiding of control has been facilitated by the adroit use of such devices as the proxy system, the issuance of non-voting securities and above all the erection of a superstructure of holding companies, in each of which the possession of a small minority of ownership interests is adequate to assure control over subordinate units. This development appears to have been carried further in the United States than in most other industrialized countries and in the United States further in the field of the public utilities than in most other fields of investment. But it is plainly capable of wider application than it has hitherto enjoyed. And the lucrative emoluments attached to the possession of large scale control divorced from proprietary respon-

sibility, such as the generous allowances for underwriting fees and for other financial services—not to mention that still more fruitful source of gain, security speculation backed by deliberate manipulation of accounts—bid fair to foster extensive developments in this direction in the future. This of course presupposes the continuance of the legal status quo ante.

The social and economic consequences of large scale production vary according to the type or phase of the movement considered. In a sense it has justified both the hopes and the fears of those groups of early observers who saw in it either the possibility of emancipation from toil and poverty, the basis of the new socialist state or, on the other hand, the end of all individual sufficiency and social stability and the increasing exploitation of the worker. Perhaps the most distinctive effect of the growth of large scale output is the advance made possible, by increased productivity, in the general standard of living. Probably the most salient outcome of the development of large scale ownership, although it has undoubtedly contributed something to the rise of the plane of living, is the increasing standardization of consumption; while the most significant result of the emergence of large scale control appears to be the deflection of the energies of the boldest and most enterprising elements of the community into sterile if not predatory channels.

Viewed comprehensively and in its larger aspects there seems little reason to doubt that the whole movement toward ever widening interdependence, integration and concentration has brought upon the masses of the people which have come within its ambit a sense of lethargy, of futility, of frustration and a real atrophy of the powers of self-direction and self-expression for which the advance in the material comforts of life affords a poor compensation. Moreover the insecurity which attaches to the claims of the ordinary worker and investor to participation in the usufruct of large scale industry, under the institutional arrangements which still prevail in most western countries despite these revolutionary economic developments, makes it questionable whether even the vaunted offsets to their steady loss of real independence have genuine substance. However this may be, it is certain that the growth of large scale output has tended to submerge the workers, as the advance of large scale ownership has tended to subdue the consumers and as the development of large scale control has brought about the eclipse of

independent enterprisers and the disfranchisement of investors.

Loss of elasticity—progressive incapacity for spontaneous adaptation to new conditions—is the manifest outcome of this increasing specialization and subjugation in industrialized countries. The resiliency and flexibility of a *laissez faire* economy, under the technological and social conditions characteristic of the period in which that type of institutional structure took shape, were among the most favorable factors promoting the survival of and gaining ascendancy for the societies which adopted it. But under the new technology and its accompaniment of large scale production those same societies in so far as they still hold to the same institutional framework appear to be confronted with a grave dilemma. On the one hand, in the productive sphere there is an increasing pressure toward standardization of the supplies of goods (from so-called fixed costs, overhead costs and intensive specialization). On the other hand, in the sphere of consumption, while standardization is conspicuous enough, demand tends to be transient, febrile and undependable. This is partly due to the fact that with increasing productivity and the rise in the general standard of living an increasing proportion of the social income is perforce spent upon goods and services catering to passing wants instead of being devoted to imperative human needs. To an even greater extent, however, it appears to be traceable to the circumstance that savings also and for the same reasons, assigned a steadily increasing proportion of total income, are nevertheless egregiously erratic, the more so because of the pronounced inequalities in the distribution of the social wealth and income, magnified in recent years by the growth of large scale ownership and large scale control.

In these circumstances the economical allocation of productive resources has become if not impossible at least little better than a sheer gamble. Until there is resolved the fundamental discrepancy between the unremitting pressure of a productive system made up of minutely specialized and rigidly "fixed" cost elements to turn out a continuous stream of strictly standardized products and the persistent pressure of consumptive forces for an output of capital equipment, style goods and luxuries increasingly variable in kind and somewhat in time, it may safely be predicted that there will be no cessation of the prevalent "social unrest." For there can be no social peace where there is no eco-

nomic security. And there cannot be economic security so long as industry functions in an institutional milieu founded upon such an anomaly.

MYRON W. WATKINS

See: PRODUCTION; INCREASING RETURNS; COST; OVERHEAD COST; STANDARDIZATION; SPECIALIZATION; LOCALIZATION OF INDUSTRY; FACTORY SYSTEM; INDUSTRIAL REVOLUTION; MACHINES AND TOOLS; TECHNOLOGY; LANDED ESTATES; PLANTATION; POWER, INDUSTRIAL; MARKET; MANAGEMENT; EFFICIENCY; BUSINESS ADMINISTRATION; SCIENTIFIC MANAGEMENT; PROFIT; COMBINATIONS, INDUSTRIAL; CARTEL; TRUSTS; HOLDING COMPANIES; CORPORATION; RETAIL TRADE; RATIONALIZATION; NATIONAL ECONOMIC PLANNING; LABOR MOVEMENT; SOCIALISM; GUILD SOCIALISM; CONSUMPTION; INDUSTRIALISM; RURAL INDUSTRIES.

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LA ROCHEFOUCAULD-LIANCOURT, DUC FRANÇOIS DE (1747-1827), French philanthropist. Although La Rochefoucauld-Liancourt belonged to the high nobility and held an important position in the court of Louis XVI, his primary interest was in economic improvement and philanthropic reform. A fast friend of Arthur Young, he introduced on his estate at Liancourt English methods of land cultivation and erected two manufactories. In 1789 he was elected deputy to the Constituent Assembly, where he took an active part in the work of the Comité de Mendicité, insisting upon the rights of indigents and stressing the necessity of replacing private charity by scientifically organized public welfare work. Forced to emigrate during the Terror, he went to the United States for extended study; his *Voyages dans les États-Unis d'Amérique* (8 vols., Paris 1799) abound in practical information. Following his return to France

during the Consulate La Rochefoucauld-Liancourt in company with other philanthropists set out under the direction of the chemist Chaptal, one of Napoleon's ministers, to introduce practical improvements and reforms along many lines. He was instrumental in founding the Société d'Encouragement à l'Industrie Nationale, which still exists, and in reviving and reorganizing at Châlons-sur-Marne the École d'Arts et Métiers, which he had set up on his estate in the period before the revolution. He was one of the first in France to champion vaccination against smallpox and in 1815 was one of the founders of the Société pour l'Instruction Élémentaire, which introduced the Lancaster method in France. He was president of the savings bank of Paris, founded in 1818. During the final years of his life he took up once again his agricultural and industrial enterprises at Liancourt. His funeral was an occasion for a great liberal demonstration.

GEORGES WEILL

Consult: Ferdinand-Dreyfus, *La Rochefoucauld-Liancourt* (Paris 1903); France, Ministère de l'Instruction Publique, *Procès-verbaux et rapports du Comité de Mendicité de la Constituante 1790-1791*, ed. by Camille Bloch and Alexandre Tuetey, Collection de documents inédits sur l'histoire économique de la Révolution française (Paris 1911).

LA SAGRA Y PÉRIZ, RAMÓN DIONISIO DE. *See* SAGRA Y PÉRIZ, RAMÓN DIONISIO DE LA.

LA SALLE, SAINT JEAN-BAPTISTE DE (1651-1719, canonized 1900), French ecclesiastic and educationist. La Salle was born and educated at Reims. In 1670 he went to Paris to complete his ecclesiastical studies at the Seminary of Saint-Sulpice, where he became impressed with the gratuitous parish schools for poor children. When he returned to Reims he devoted himself increasingly to educational work and finally in 1684 founded the Institute of the Brothers of the Christian Schools. This movement spread rapidly. The institute soon included not only free schools but also a novitiate for boys from fourteen to seventeen and a training college designed particularly to supply schoolmasters for country parish schools. In 1699 La Salle established at Saint-Sulpice a Sunday continuation school for young artisans, in which mathematics, drawing and trade subjects were taught. In 1705 an institute for training "brothers" was opened at Saint-Yon near Rouen, to which was added a fee paying school for boys

of the lower middle class, thus foreshadowing the modern *école primaire supérieure* and *Realschule*. La Salle also organized in 1709 what was probably the earliest reformatory. At his death the institute had 9000 pupils; at the revolution, 36,000. During the second half of the nineteenth century its activities were still further developed, and they have spread all over the world. At the present day the brothers maintain normal institutes, colleges, secondary and elementary schools, trade, technical, commercial and agricultural schools, orphanages and industrial reformatories. The total number of pupils at the end of 1931 was 302,733.

La Salle's insistence that pupils learn to read first in French rather than in Latin and his substitution of simultaneous for individual instruction in the elementary school were important reforms in contemporary educational practise. Both in his educational schemes and in his teaching methods, which he prescribes in his *Conduite à l'usage des écoles chrétiennes* (Avignon 1720, new ed. Paris 1838), La Salle owes much to other pioneers; but his genius consisted in his realization of the value of their suggestions and in putting them effectively into practise. The present activities of the institute have developed directly out of his work and are still carried on under his inspiration.

H. C. BARNARD

Consult: Guibert, Jacques, *Histoire de S. Jean-Baptiste de La Salle* (2nd ed. Paris 1901); Thompson, Francis, *The Life and Labours of Blessed John Baptist de la Salle* (London 1891); Laudet, Fernand, *Saint Jean-Baptiste de la Salle, l'instituteur des instituteurs* (Tours 1929); Adamson, J. W., *Pioneers of Modern Education* (Cambridge, Eng. 1905) ch. xii.

LAS CASAS, BARTOLOMÉ DE (1474-1566), Spanish missionary and emancipator. Las Casas studied philosophy and the humanities at the University of Salamanca. In 1502 he left Spain for America and settled on the island of San Domingo, where he exploited the natural resources of his father's estates. Even after entering the priesthood in 1510 he continued to employ the economic practises common among the Spanish colonists in America and became an *encomendero* in Cuba, a position entitling him to operate his estates by enforced Indian labor. In 1514, possibly as a result of contact with Dominican friars, his messianic spirit was aroused. He began an impassioned and life long struggle to halt the exploitation of the Indians and to establish an Indian policy aimed toward the conversion and enlightenment of their naturally vir-

tuous souls. The diverse methods by which he sought to give reality to the title of General Protector of All Indians, which the Spanish government conferred upon him in 1515, included missionary enterprises, intercessions with the authorities in Spain and polemics. In 1517 he persuaded the Spanish government to accept the proposal made by the *encomenderos* that they would liberate the Indians provided they each be granted twelve Negro slaves from Africa. The measure on the one hand failed of its intention and on the other acted as a stimulant to the Negro traffic. Las Casas later repented of his part in the early stages of this traffic, although he was not, as has been charged, responsible for its introduction. In 1520 and again in 1521 he tried unsuccessfully to establish ideal communities of Indians on the Cumaná River in modern Venezuela. After a period of seclusion in the San Domingo priory of the Dominican order, which he entered in 1523, he undertook to apply his ideas for the conversion of the Indians in Guatemala, this time with striking results. Between 1534 and 1539 he maintained a theocratic polity in the Guatemalan provinces of Cobán and Tuzulutlán, admitting only indigenous Indians and excluding white men, making concessions to the native customs and slowly initiating the aborigines into civilized life. Making his fourth voyage to Spain after this experiment he was largely responsible for the promulgation of the *Nuevas leyes de Indias* of 1542, which abolished Indian slavery and provided for the gradual eradication of the encomienda system. A doctrinal ally of Las Casas' position was furnished by the ideas then current in the highest cultural circles of Spain, where the school of Francisco de Vitoria had propagated the conception of a natural law identical for all men and of a religious although not dogmatic unity of the human race. But despite ideological support, the favor of the king and the Council of the Indies, the assistance of the Franciscans and Dominicans and the pope's dictum in 1537 that the Indians were rational beings worthy of elevation to the status of other Christians Las Casas' efforts succumbed before the forces making for the triumph of a seigniorial economic system in Spanish America. The *Nuevas leyes* were whittled down to impotence. Las Casas' work was, however, an important contributory cause for the emphasis in eighteenth century literature on the excellences of the primitive man. His principal writings were: *Brevissima relación de la destruyción de las Indias* (Seville 1552, repr. as *Breve . . .*

Indias occidentales, 1821; tr. by F. A. MacNutt in his *Bartholomew de Las Casas*, New York 1909, app. i); *Historia de las Indias* (first published 5 vols., Madrid 1875-76; 2nd ed. by Gonzalo de Reparaz, 3 vols., 1927), a work with which he was occupied from 1520 until 1561 and which is not only an important source for ethnological materials but also one of the first histories of America; and *Apolegética historia de las Indias* (first published Madrid 1909).

FERNANDO DE LOS RÍOS

Consult: Fabié y Escudero, A. M., *Vida y escritos del padre Fray Bartolomé de Las Casas* (Madrid 1879); MacNutt, F. A. M., *Bartholomew de Las Casas* (New York 1909); Helps, Arthur, *The Life of Las Casas* (3rd ed. London 1873); de los Ríos, F., "El anhelo universalista en los teólogos españoles del siglo xvi" in *Revista de estudios hispánicos*, vol. i (1928) 125-32; Plischke, Hans, "Westindien und Las Casas" in *Archiv für Kulturgeschichte*, vol. xviii (1928) 309-27; Stoll, Otto, "Der Bischof Bartolomé de Las Casas, ein Zeitgenosse des Columbus, seine wissenschaftlichen und humanitären Verdienste" in *Geographisch-ethnographische Gesellschaft in Zürich, Mitteilungen pro 1907-1908* (Zurich 1908) p. 25-69; Tschan, F. J., "Las Casas (c. 1474-1566)" in *Church Historians*, ed. by Peter Guilday (New York 1926) p. 128-52.

LASKER, EDUARD (1829-84), German statesman. Lasker, the son of a Jewish merchant, was born in Posen. He studied law at Breslau and Berlin and in 1848 participated in the academic legion of Robert Blum in Vienna. He became an admirer of English liberalism and individualism during his travels in England from 1853 to 1856. On his return to Prussia he attracted attention by his journalistic work and in 1865 became a member of the Prussian lower chamber. He was a member of the Diet of the North German Confederation after 1866 and after 1870 was one of the leaders of the National Liberal party in the Reichstag.

Lasker was one of the most prominent representatives of early German parliamentarism. He was active at the time of the foundation of the German Empire in endeavoring to win the public opinion of south Germany in favor of a union with the north and collaborated with Bismarck in the constitutional development of the empire. As a parliamentarian he was an active member of innumerable commissions, being responsible for the resolutions demanding a common law of obligations, commercial law, criminal law and civil law for the empire, and for the address which the newly elected Reichstag in 1871 presented to the emperor. Distinguished by erudition and by a very lucid if pedantic power of exposition, he held by reason of his upright character a very

estimable position as a watchful fighter of all corruption. When Bismarck inaugurated a policy of protectionism and discriminatory legislation against the Social Democrats, Lasker went over to the opposition; and when his party allowed itself to be led by Bismarck up to the point of abandoning its own will, he left it in 1880. In 1883 he toured the United States; he died suddenly in New York. So great an aversion did Bismarck retain for the man who had taken such a prominent part in the accomplishment of his work that he did not pass on to the German Reichstag a message of condolence on this occasion from the American House of Representatives. Lasker, who is closely associated with Ludwig Bamberger, was not so much a creative personality as a representative of a humanitarian nationalism and of a trusting liberalism suspicious of the state and advocating self-government in civil matters.

THEODOR HEUSS

Consult: Bamberger, L., *Eduard Lasker* (Leipsic 1884); Schmoller, G., *Zur Social- und Gewerbepolitik der Gegenwart* (Leipsic 1890) p. 327-41; Klein-Hattingen, Oskar, *Geschichte des deutschen Liberalismus*, 2 vols. (Berlin 1911-12).

LASPEYRES, ÉTIENNE (1834-1913), German statistician and economist. Laspeyres studied at Heidelberg and from 1874 to 1900 taught at the University of Giessen. His main contribution is in the field of statistics, especially price statistics. Of his early work his researches concerning Hamburg commodity prices from 1851 to 1863 are especially well known. Later he published a number of comprehensive price studies, the materials for which were collected and worked up in his small statistical laboratory. The most important of them deal with general price movements in the second half of the nineteenth century and with Prussian prices of farm products from 1821 to 1895. In connection with his price studies Laspeyres also made important contributions to the technique of index numbers. He originated the index number formula $\frac{\sum p_1 \cdot q_0}{\sum p_0 \cdot q_0}$, in which the numerator is the sum of current prices with basic period weights and the denominator the sum of base period prices similarly weighted. He never applied this formula, however, for insufficient data prevented him from ascertaining "the quantities of every good consumed in a country." In the pamphlet "Die Kathedersocialisten und die statistischen Congresse" (*Deutsche Zeit- und Streit-Fragen*, vol.

iv, no. 52, Berlin 1875) he pleaded among other things for a quantitative economics which would trace the regularities in social phenomena.

RUDOLF MEERWARTH

Important works: "Hamburger Waarenpreise 1851-1863 und die californisch-australischen Goldentdeckungen seit 1848" in *Jahrbücher für Nationalökonomie und Statistik*, vol. iii (1864) 81-118, 209-36; "Preise (die Bewegungen der Warenpreise in der zweiten Hälfte des 19. Jahrhunderts)" in *Meyers Konversations-Lexikon*, vol. xx (3rd ed. Leipsic 1883) p. 795-803; "Einzelpreise und Durchschnittspreise vegetabilischer und animalischer Produkte in Preussen während der 75 Jahre 1821 bis 1895" in Prussia, Statistisches Bureau, *Zeitschrift*, vol. xli (1901) 51-81; "Die Berechnung einer mittleren Warenpreissteigerung" in *Jahrbücher für Nationalökonomie und Statistik*, vol. xvi (1871) 296-314; "Statistischen Untersuchungen zur Frage der Steuerüberwälzung" in *Finanz-Archiv*, vol. xviii (1901) 46-282; *Geschichte der volkswirtschaftlichen Anschauungen der Niederländer* (Leipsic 1863); *Der Einfluss der Wohnung auf die Sittlichkeit* (Berlin 1869).

LASSALLE, FERDINAND (1825-64), German socialist labor leader. Lassalle, an exceptionally precocious son of a Jewish merchant, displayed even in school those characteristics which were later to bring about his rise as well as his sudden downfall: an iron will, a rare demagogical talent and a driving ambition. He was as egocentric as he was determined to free individuals and groups from injustice and oppression. The Jews in Prussia enjoyed at the time no political equality and were regarded socially with increasing disdain. For this very reason Lassalle while a student was drawn to the ruling aristocratic circles and there found the first opportunity to play the role of liberator to which he felt himself born. He became the trusted friend of Countess Hatzfeldt, twenty years older than himself, who in her numerous lawsuits against her husband found insufficient sympathy among her aristocratic acquaintances. In the course of managing her affairs Lassalle developed into a learned jurist and a powerful public speaker.

It was Lassalle's great contribution to call into being the first political party of German workers, the Allgemeiner Deutscher Arbeiterverein, organized in 1863. Although during the Revolution of 1848 he belonged to the small communist group which gathered around Marx and although he adapted some of Marx' ideas Lassalle cannot be considered a pupil of Marx. While both men were decisively influenced by Hegel, Marx abandoned and Lassalle retained the point of view of German idealistic philosophy. Marx materialized dialectic into the class struggle; but

Lassalle, as is shown by *Das System der erworbenen Rechte* (Leipsic 1861), did not regard the world of ideas as determined entirely by economic and class relations. He remained under the influence of Hegel's philosophy of the state, that peculiar mixture of the tradition of the Greek polis and Prussian bureaucracy. His view of the state and his theory of the "iron law of wages" led him to neglect economic struggle and organization and to demand that the government help the workers by granting them capital or credit with which they might organize producers' co-operatives. Richer in ideas than Louis Blanc, more effective than Rodbertus and Lorenz von Stein, all of whom stimulated him, Lassalle preached that brand of state socialism which still dominates certain sections of the Social Democratic party.

In 1863 Lassalle attacked the Liberal Progressive party, which was waging a struggle with Bismarck over parliamentary government in Prussia, and thereby created a tactical community of interests between the revolutionary and the reactionary opponents of the liberal bourgeoisie. Lassalle's chief political demand was immediate universal suffrage, which he expected Bismarck would be forced to grant in the event of war for the unification of Germany. But his egocentric nature required more rapid results than the march of events promised; he had discussed the matter personally with Bismarck and had almost decided to break off his agitation, the results of which appeared so slow, when he was killed in a duel.

GUSTAV MAYER

Works: *Gesammelte Reden und Schriften*, ed. by Eduard Bernstein, 12 vols. (Berlin 1919-20); *Nachgelassene Briefe und Schriften*, ed. by Gustav Mayer, 6 vols. (Stuttgart 1921-25); *Bismarck und Lassalle, Ihr Briefwechsel und ihre Gespräche*, ed. by Gustav Mayer (Berlin 1928); *Ferdinand Lassalles Briefe an Georg Herwegh*, ed. by Marcel Herwegh (Zurich 1896); *Briefe an Hans von Bülow von Ferdinand Lassalle* (Dresden 1893); *Intime Briefe F. Lassalles an Eltern und Schwester*, ed. by Eduard Bernstein (Berlin 1905).

Consult: Brandes, G., *Ferdinand Lassalle* (London 1911); Dawson, W. H., *German Socialism and Ferdinand Lassalle* (3rd ed. London 1899); Oncken, H., *Lassalle, eine politische Biographie* (4th ed. Stuttgart 1923); Bernstein, Eduard, *Ferdinand Lassalle, eine Würdigung des Lehrers und Kämpfers* (Berlin 1919), and "Ferdinand Lassalle und seine Bedeutung in der Geschichte der Sozialdemokratie" in *Lassalle's Reden und Schriften*, vol. i (Berlin 1892) p. 5-185, tr. by E. Marx Aveling as *Ferdinand Lassalle as a Social Reformer* (London 1893); Becker, Bernhard, *Geschichte der Arbeiter-Agitation Ferdinand Lassalles* (Brunswick 1874); Baron, S., *Die politische Theorie Ferdinand*

Lassalles, Archiv für die Geschichte des Sozialismus und der Arbeiterbewegung, Supplement, no. 2 (Leipsic 1923); Thier, E., *Rodbertus, Lassalle, Adolph Wagner* (Jena 1930).

LASTARRIA, JOSÉ VICTORINO (1817-88), Chilean statesman, historian and jurist. At first a disciple of the Benthamite Andrés Bello, Lastarria later joined the distinguished company of Latin Americans who were greatly affected by the ideals of the French Revolution of 1848. He showed the influence of Edgar Quinet among others and later became imbued with the ideas of Comte. He exercised a powerful influence upon the intellectual and political growth of Chile.

Lastarria's efforts to further the production of a national literature together with his own numerous works in the fields of the novel, geography, biography, history, sociology and political science have won for him the title of "the father of Chilean literary development." In his critical and philosophic *Investigaciones sobre la influencia social de la conquista i del sistema colonial de los españoles en Chile* (Santiago, Chile 1844) he departed from the purely narrative type of history then in vogue in Chile. In his political and social analysis *La América* (Buenos Aires 1865; 2nd ed. of pt. i Ghent 1867), which also includes a considerable amount of historical material, and in his *Recuerdos literarios* (Santiago, Chile 1878, 2nd ed. 1885), which contains a literary history of the nation during its first fifty years of independent life, he expressed his faith not only in America but in democratic institutions. His confidence in the latter finds full expression in that part of his legal works which is devoted to the study of the national public law and constitutional development, a discipline which he introduced into Chile. Perhaps the most outstanding of his works in political science and sociology, which are rather doctrinaire in character, is his *Lecciones de política positiva* (Santiago, Chile 1874; 2nd ed. Paris 1875). García Calderón compares Lastarria with Francisco Bilbao (1823-65), calling the former the politician and the latter the apocalyptic dreamer of the group of reformers who sought, according to Lastarria, to erect a state which has for its object respect for the rights of the individual. The activity of these reformers brought about after some thirty years of conservative rule the era of the liberal republic which began in the 1860's.

PAUL VANORDEN SHAW

Works: *Obras completas*, ed. by A. Fuenzalida Grandón, 8 vols. (Santiago, Chile 1906-09).

Consult: Fuenzalida Grandón, Alejandro, *Lastarria i*

su tiempo (1817-1888), su vida, obras e influencia en el desarrollo político e intelectual de Chile, 2 vols. (new ed. Santiago, Chile 1911); Rodríguez Bravo, Joaquín, *Don José Victorino Lastarria* (Santiago, Chile 1892); Huneus y Gana, Jorge, *Cuadro histórico de la producción intelectual de Chile* (Santiago, Chile 1910); Edwards, Agustín, *My Native Land* (London 1928) p. 338-41; García Calderón, Francisco, *Les démocraties latines de l'Amérique* (Paris 1912), tr. by B. Miall as *Latin America: Its Rise and Progress* (London 1913) p. 236-39.

LATANÉ, JOHN HOLLADAY (1869-1932), American historian. Latané became professor of history at Johns Hopkins University in 1913 and served as dean of the College of Arts and Sciences from 1919 to 1924. In 1930 he was transferred from the department of history, with which he had continued to maintain his connection, to the faculty of the Walter Hines Page School of International Relations, in the organization of which he took an active part. His primary interests lay in the field of American foreign policy and diplomatic history. As a historian and public lecturer he was known for his independence of judgment and courageousness in criticizing foreign policies of the United States which he considered irreconcilable with true national interests or the canons of international public morality. He had little sympathy for the bogey of "entangling alliances," popular shibboleths and outworn traditions, which in his opinion had played too large a role in the foreign policy of the United States. Although he believed in the Monroe Doctrine as a policy of national defense he belonged to that increasingly large class of American scholars who deplore the tendency to extend by interpretation its original object in order to justify policies of intervention and imperialism in Latin America. He was an ardent supporter of the foreign policies of President Wilson and advocated membership of the United States in the League of Nations and the Permanent Court of International Justice. A severe critic of the policy of American isolation, which he regarded as both selfish and short-sighted, he felt that the United States since becoming a world power had shirked the responsibilities of leadership and thrown away opportunities for helpful cooperation which that leadership had brought. He took an active interest in public affairs, was an effective public speaker and was much in demand as a lecturer before learned societies and civic organizations.

JAMES WILFORD GARNER

Important works: *The Diplomatic Relations of the United States and Spanish America* (Baltimore 1900);

America as a World Power 1897-1907, American Nation series, vol. xxv (New York 1907); *From Isolation to Leadership* (New York 1918, rev. ed. 1922); *The United States and Latin America* (New York 1920); *A History of American Foreign Policy* (New York 1927).

LATHROP, JULIA CLIFFORD (1858-1932), American social worker and public servant. Julia Lathrop belonged to that little group of influential women who lived and worked at Hull House in the 1890's. During her residence there she played a part in establishing the Juvenile Court of Cook County and in developing its probation work; she was connected with the early effort to provide professional education for social workers in Chicago; she served (1893-1901 and 1906-09) on the State Board of Charities, visiting all parts of the state to learn how state and county governments provided for the handicapped whose care they had assumed and to stimulate by counsel and advice improved methods of care. In 1912 she was appointed chief of the newly organized Children's Bureau in the United States Department of Labor, a position which she held until 1921. In this capacity she succeeded in winning an accepted place for the new bureau in the national government, in attracting to its positions an unusually able personnel selected by competitive examination through the Civil Service Commission, in selecting vital subjects for study and in establishing high standards for the quality of research; she was instrumental in the extension of the birth registration area, in achieving an efficient administration of the federal child labor law during its brief existence and in the passage of the Sheppard-Towner Act of 1921, which provided federal grants-in-aid to the states for use in promoting maternal and infant hygiene. In 1925 she was appointed by the United States government as assessor to the Child Welfare Committee of the League of Nations.

Julia Lathrop's interests were many and varied but her work centered in the three fields of public welfare administration, child welfare and public civil service. It was characterized by a few dominant ideas to which she sought to give expression: public responsibility for the care of the handicapped, the importance of "a public service of such practical opportunities and such great ideals that our ablest youth may look forward to it as a career" and a strong belief in the value of a knowledge of the facts. She repeatedly stated her conviction that an agency which had the power to investigate and report the relevant facts was able to accomplish a great deal. Her

personal qualities had much to do with the effectiveness of her work. She was willing to compromise when she could do so without betraying her ideals and ready to hold out to the end when compromise appeared worse than failure. Her sense of perspective made it possible for her to appreciate the past and enthusiastically to serve causes in the present without believing that she had found the ultimate solution.

HELEN R. WRIGHT

Consult: Addams, Jane, "A Great Public Servant, Julia C. Lathrop" in *Social Service Review*, vol. vi (1932) 280-85, and editorial, p. 301-06.

LATIFUNDIA. It is probable that at the height of the Etruscan empire, in the seventh and sixth centuries B.C., there sprang up in central Italy a class of large proprietors; there is no other explanation for the luxury of the aristocracy, the existence of great drainage systems which improved part of the land of southern Etruria and Latium, and the development of grape and olive cultivation. Even at Rome tradition preserved the memory of the vast domain of the Tarquins. In the early years of the republic, however, the advances made by the plebeians finally strengthened the peasant proprietors; the result was such a diffusion of land-ownership that in the early years of the third century the average farm holding was only seven jugers (a little more than four acres). The right to the use of the *ager publicus* was so regulated as to check its preemption by the great livestock raisers, but within the following century a marked change set in and after 200 B.C. the land came to be increasingly concentrated in the possession of the ruling aristocracy.

There were several leading causes for this concentration of land. First, the free small peasant had been ruined by a long series of wars and also by the usurious practises then prevailing, while as a result of conquest wealth accumulated at Rome. Since by the *lex claudia de senatoribus* (c. 220 B.C.) senators were prohibited from engaging in commerce and banking, they were compelled to find new outlets for their capital in the acquisition of landed estates. Second, free labor was not able to withstand the competition of the slaves, who had been introduced into the republic in great numbers following the victories of the Roman generals. Third, the Roman state owned a vast public domain which lent itself to usurpation. Fourth, Italian agriculture was unable to compete with the grains sent as tribute to Rome by

the provinces. The importance of this last factor must not be exaggerated, however, for the inadequacy of transportation facilities at this period narrowly limited the penetration of foreign grain into the interior of Italy.

Furthermore conquest rendered Rome mistress of countries in which the governing classes had already organized large estates. In Asia Minor and Syria, for example, the Greeks had long cultivated by rational agricultural methods vast holdings, of which some had been established even before the Persian domination. Hellenistic practises had spread westward and had contributed toward fixing the form of organization of the great estates of the Sicilians and Carthaginians. Even in Gaul the Gallic aristocracy collected rents from peasants living on the large landed properties of their lords.

In the second century B.C. the advances of the large estate and slave labor at first favored the development of a pastoral economy, at any rate in Italy and Sicily. Then following the example of the Hellenistic east and Carthage Roman senators began the commercial exploitation of their properties. The Senate officially ordered the translation of the manual of agronomy written by the Carthaginian Mago. Cato's treatise on agriculture, designed expressly to awaken Roman landowners to a clearer appreciation of their duties as tillers of the soil, furnishes a valuable description of the organization of an Italian farm in the first half of the second century B.C. The estate of which he writes is not an isolated, self-contained property whose owner proposes to raise and fabricate everything for his own needs; on the contrary, Cato points out how important it is that the farm be located near means of communication to allow the easy sale of its produce. Because revenues result largely from the sale of oil and wine, it is imperative that extensive cellars be provided for storage purposes so that advantage may be taken of favorable market prices. The labor supply is made up of slaves and day laborers; apparently free farmers no longer exist. The most striking characteristic of the whole picture is the role played in it by the contractors, who furnish gangs of laborers, clean the land and vineyards and often purchase the hanging crop. Thus a whole class of speculators has sprung into activity about the latifundia.

In the first century of the empire the large estates of Italy, as described by Columella, do not appear to differ materially. The labor used is slave in the case of those estates where the

owner himself is able to superintend the operations. But where the holdings are remotely located, recourse is generally had to tenant farmers (*coloni*). Pliny the Elder makes the latifundia responsible for the decay of land cultivation in Italy and even in the provinces. It is to be noted, however, that such great landed properties were not very stably organized: financial crises (as under Tiberius in 33 A.D.) and periods of great wine surpluses (as under Domitian) frequently forced property transfers. The tablets relating to the *alimenta* in the territory of Veleia (under Trajan) prove plainly that changes in landownership, parceling of large estates and creation of new latifundia were continually taking place.

Even under the republic the large Roman proprietors had been forced to resort, as far as isolated estates were concerned, to *coloni* instead of to slaves. Similarly under the empire the estates created by the senators and imperial freedmen in north Africa (the *saltus*) and in Egypt (the *ousiai*) were tilled by a native peasantry made up of dispossessed proprietors. In Italy itself in the second century A.D. the decrease in the number of slaves as a result of the termination of the period of conquests caused a labor crisis, which was further aggravated by the depopulation of the countryside. The typical estate of the second century in Italy is described by Pliny the Younger. The proprietor lives only occasionally on his land, leaving active management of his various holdings to the *procurator*. Each particular farm has its own steward, or *villicus*, who is a slave himself and directly in charge of the slave gangs. The field work especially devolves upon the tenant farmers, or *coloni*, whose permanent tenancy must be secured by long term leases.

Following Nero's confiscations the head of the state became the largest proprietor in the empire, with the result that the Flavians carefully concerned themselves with the administration of their *saltus* in Africa and their *ousiai* in Egypt. African inscriptions reveal the fact that the revenues of the imperial estates were collected by large farmers, or *conductores*, who were actually the lessees and that these in turn were superintended by imperial agents, or *procuratores*. Each estate consisted of two parts: one, comprising the *villae dominicae*, was operated directly by the *conductor* himself; the other was divided into small holdings worked by the *coloni*. These latter were responsible for the payment of shares of produce and in addition for the rendering of *corvée* on the part of the

estate farmed directly by the *conductor*. The small tenant farmers were encouraged to reclaim those waste or abandoned portions of the estate which the lessees were permitting to lie untilled; the *lex manciiana* of the time of Vespasian and later the more precise *lex hadriana* vested in the *coloni* not only possession but also a heritable tenure in such lands, on condition that they turn over a fixed rent to the lessee for the account of the state. This separation of the *saltus* into two parts, one partitioned into small holdings, the other the home farm cultivated by the *corvée* of the *coloni*, already presages the manor of the Middle Ages.

As a result of the chaos of the third century large holdings increased, for the empire could no longer safeguard the free peasants from attack and their lands from seizure. The villages on their part sought out the protection of military leaders; and this patronage, as it was called, was later converted into a property right. Indeed at the beginning of the fifth century the empire was compelled officially to recognize this usurpation. On its own domains the empire either multiplied perpetual and emphyteutic leases or it required the free proprietors to cultivate the crownlands. At the beginning of the fifth century, however, these practises ceased when the emperor surrendered his property rights in his former domains.

From the beginning of the empire in certain of the provinces the *latifundia* had formed autonomous administrative districts which were not dependent upon the cities but were directly ruled by the imperial governors. This autonomy continued to increase, with the result that the lands of the senators came to form a privileged category. Further the large proprietors were made responsible for the collection of the taxes of their districts, while to insure the stability of these taxes the state bound the peasants to the soil and made their condition hereditary. The law of Constantine in 332 gave formal legal status to what had been established custom from the time of Severus. In fact in this same fourth century there appeared not only private prisons but the private administration of justice as well. At the same time the large estate tended to acquire economic autonomy. After the debasement of the currency in the third century commercial activity received a severe setback. Since the most flourishing days of the empire the proprietors had acquired from the Senate by individual concessions the right to open markets on their lands. Large villages now grew

up around these markets. Finally following the ruin of the municipal regime the proprietors were glad to live on their lands among their dependents.

When the Roman Empire was at its height, the large estates had sustained the senatorial order and had furnished the nation its generals and governors: such had been the social role of the *latifundia*. It must not be understood, however, that the large estates disappeared during the period of the barbarian invasions. They continued, for the Germans replenished the sorely depleted labor supply and respected the title deeds of the properties. And once again the role of the *latifundia* became significant, for in many instances the large estate became the manor—the heart of the feudal system of the Middle Ages. The continuity of the Roman period into the mediaeval period is particularly clear in the west in the case of the church lands and in the east in the case of the estates of the Byzantine lords.

ANDRÉ PIGANIOU

See: LANDED ESTATES; LAND TENURE, section on ANCIENT WORLD; COLONATE; AGRARIAN MOVEMENTS, section on CLASSICAL ANTIQUITY; SLAVERY; SERFDOM; FARM TENANCY; MANORIAL SYSTEM.

Consult: Weber, Max, *Die römische Agrargeschichte in ihrer Bedeutung für das Staats- und Privatrecht* (Stuttgart 1891), and "Agrargeschichte," sect. i, "Agrarverhältnisse im Altertum" in *Handwörterbuch der Staatswissenschaften*, 8 vols. (3rd ed. Jena 1909-11) vol. i, p. 52-188; Heitland, W. E., *Agricola* (Cambridge, Eng. 1921); Rostovtzeff, M. I., *The Social and Economic History of the Roman Empire* (Oxford 1926); Clausen, Roth, *The Roman Colonate: the Theories of Its Origin*, Columbia University, Studies in History, Economics and Public Law, vol. cxvii, no. 1 (New York 1925); Mommsen, Theodor, "Die italische Bodenteilung und die Alimentartafeln" in his *Gesammelte Schriften*, vol. v (Berlin 1908) ch. ix; Gummerus, Herman, "Der römische Gutsbetrieb als wirtschaftlicher Organismus nach den Werken des Cato, Varro und Columella" in *Klio*, supplement no. 5 (Leipzig 1906); Kromayer, Johannes, "Die wirtschaftliche Entwicklung Italiens im 11. und 1. Jahrhundert vor Chr." in *Neue Jahrbücher für das klassische Altertum, Geschichte und deutsche Literatur und für Pädagogik*, vol. xxxiii (1914) 145-69; Pachtère, F. G. de, *La table hypothécaire de Veleia*, École Pratique des Hautes Études, Bibliothèque, Sciences Historiques et Philologiques, vol. ccxxviii (Paris 1920) ch. vi; Fustel de Coulanges, N. D., "L'alleu et le domaine rural pendant l'époque mérovingienne" in his *Histoire des institutions politiques de l'ancienne France*, vol. iv (Paris 1889); Schulten, Adolf, *Die römischen Grundherrschaften* (Weimar 1896) p. 12-15, 19-20; Beaudouin, Édouard, "Les grands domaines dans l'empire romain" in *Nouvelle revue historique de droit français et étranger*, vol. xxi (1897) 543-99, 673-720, and vol. xxii (1898) 27-115, 194-219, 310-50, 545-84, 694-746; Broughton, T. R.

S., *The Romanization of Africa Proconsularis*, Johns Hopkins University, Studies in Historical and Political Science, extra volumes, n.s., no. v (Baltimore 1929) ch. v; Rostovtzeff, M. I., *A Large Estate in Egypt in the Third Century B.C.*, University of Wisconsin, Studies in the Social Sciences and History, no. vi (Madison 1922); *Studies in the History and Art of the Eastern Provinces of the Roman Empire*, ed. by W. M. Ramsay, Aberdeen University, Studies, no. xx (Aberdeen 1906); Fustel de Coulanges, N. D., "Le colonat romain" in his *Recherches sur quelques problèmes d'histoire* (2nd ed. Paris 1894) p. 1-186; Rostovtzeff, M. I., "Geschichte der Staatspacht in der römischen Kaiserzeit" in *Philologus, Supplementband*, vol. ix (1902) 329-512, and "Studien zur Geschichte des römischen Kolonates" in *Archiv für Papyrusforschung und verwandte Gebiete*, supplement no. 1 (1910); Mitteis, Ludwig, "Zur Geschichte der Erbpacht im Alterthum" in *Sächsische Akademie der Wissenschaften, Philologisch-historische Classe, Abhandlungen*, vol. xx, no. iv (Leipzig 1901); Waszyński, Stefan, *Die Bodenpacht. Agrargeschichtliche Papyrusstudien*, vol. i- (Leipzig 1905-); Gummerus, Herman, "Die Fronen der Kolonen" in *Finska Vetenskaps-Societeten, Öfversigt af förhandlingar*, vol. 1, no. iii (Helsingfors 1907-08); Wiart, René, *Le régime des terres du fisc au Bas-Empire* (Paris 1894); His, Rudolf, *Die Domänen der römischen Kaiserzeit* (Leipzig 1896); Zulueta, Francis de, "De patrocinii vicorum" in *Oxford Studies in Social and Legal History*, vol. i, pt. ii (Oxford 1909); Dopsch, Alfons, *Wirtschaftliche und soziale Grundlagen der europäischen Kulturentwicklung*, 2 vols. (2nd ed. Vienna 1923-24) vol. i; Mommsen, Theodor, "Die Bewirthschaftung der Kirchengüter unter Papst Gregor I" in his *Gesammelte Schriften*, vol. iii (Berlin 1907) ch. xviii; Gelzer, Matthias, *Studien zur byzantinischen Verwaltung Ägyptens*, *Leipziger historische Abhandlungen*, vol. xiii (Leipzig 1909); Hardy, E. R., *The Large Estates of Byzantine Egypt*, Columbia University, Studies in History, Economics and Public Law, no. 354 (New York 1931).

LATIN MONETARY UNION. See MONETARY UNIONS.

LA TOUR DU PIN CHAMBLY, RENÉ DE, MARQUIS DE LA CHARCE (1834-1924), French social theorist. While held captive by the Germans during the Franco-Prussian War La Tour du Pin and Albert de Mun, both French officers and ardent Catholics, began to work out their program for the regeneration of France through the church. In 1871 they founded the Oeuvre des Cercles Catholiques d'Ouvriers, a society aiming not to rouse the laborers to independent action for the furtherance of their interests but to unite them in Christian corporations with the employers and to place them under the guidance of directive committees recruited from the upper classes. In contrast to de Mun, who was the orator and propagandist of the Oeuvre, La Tour

du Pin was its theorist and the principal editor of the economic and social journal *Association catholique* published by the society. When he came to collect his most important articles and reports as *Vers un ordre social chrétien, jalons de route, 1882-1907* (Paris 1907, new ed. 1929) he stated in the preface: "The rupture with liberalism in religion, in economics, in politics, is its guiding thread from first to last." He went on to demonstrate that after having taken the Catholic, anti-equalitarian and anti-individualistic view with regard to the labor question he had gradually broadened its application until he finally became convinced of the necessity of a Bourbon restoration in France. During the centenary celebration of 1889 he gave a number of lectures outlining a program directly opposed to the ideas of the French Revolution. After 1892 the close association which had previously existed between him and de Mun began to be severed. While de Mun obeyed the instructions issued by Pope Leo XIII in 1893 and became reconciled to the republic, La Tour du Pin remained consistently royalist; he also accepted the title of Christian Socialist, which de Mun disavowed. The Oeuvre, which had resulted from their collaboration, had since its foundation served as a center for the social Catholic movement and for the Catholic opponents of laissez faire. Its social program while always enshrouded in considerable vagueness had become somewhat clarified, and La Tour du Pin had ended by advocating intervention by the Christian state as a means of establishing the corporate regime. But during the 1890's it became increasingly evident that there was little correspondence between his ideas and those of the Catholic masses, the upper classes being liberal in their economic outlook and the workers being repugnant to the leadership of the élite. La Tour du Pin's political sympathies caused him toward the end of his life to become affiliated with the Action Française. La Tour du Pin had had an important part in the summoning of the first international congress of the Union Catholique d'Études Sociales et Économiques in 1884.

GEORGES WEILL

Consult: Chenevers, *Le marquis de La Tour du Pin* (Reims 1907); Lecanuet, É., *Les dernières années du pontificat de Pie IX 1870-78* (new ed. Paris 1931) p. 391-422; Weill, Georges, *Histoire du mouvement social en France, 1852-1924* (3rd ed. Paris 1924) p. 181-84; Rivain, Jean, *Un programme de restauration sociale, La Tour du Pin, précurseur* (Paris 1926); Fontanille, Henri, *L'oeuvre sociale d'Albert de Mun* (Paris 1926) p. 66-72.

LAU, THEODOR LUDWIG (1670-1740), German cameralist. Lau, who was trained as a jurist, entered in 1701 the service of Duke Friedrich Wilhelm von Kurland, of whose cabinet he became director. He lived for a time at Frankfort on the Main, where his *Meditationes philosophicae de Deo, mundo, homine* appeared in 1717. The book, which was confiscated by the city council of Frankfort as atheistic, attracted wide attention, but Lau was forced to flee. Because of his "atheism" he was unable to secure a post of any kind, and only by a formal apology before the consistory of his native province of East Prussia in 1729 was he able to free himself from the stigma. At this time he composed *Die Menschwerdungs-Historie des Heylandes der Heyden* (Königsberg 1730).

Besides his importance in the philosophy of the Enlightenment Lau occupies a leading position as a writer on economic subjects. He is a typical mercantilist. Although his economic works are based on the works of the Austrian cameralists, he greatly surpasses them in clarity of conception. As with all mercantilists the national idea is prominent in Lau's thought. Thus he advocates population increase as a prime duty and favors polygamy. The prosperity of the country consists in the cooperation of the people and the rulers. The most important classes in the nation are the farmers, the artisans and the merchants. The encouragement of manufactures and of commerce, the establishment of a bank and a rich exchequer, serve to promote the national economy. As opposed to many mercantilists Lau does not see in money the means to the wealth of the country, but he emphasizes its importance as currency. He was conscious of the international interdependence of the money market and always endeavored to strengthen the credit of the country and of private persons. On this ground he also demanded a just system of taxation, advocated the establishment of a tax commission (*Steuerkollegium*) and the introduction of an income as well as a property tax. The first German writer to make use of the word *Nationalökonomie*, he drew up a complete system of economic science and his classification of cameralistic science was generally followed to the end of the cameralistic period. Lau forms the juncture between the old and the new theoretically trained cameralists.

KURT ZIELENZIGER

Other important works: *Politische Gedancken*, published anonymously (Frankfort 1717); *Entwurf einer Wohl-eingerichteten Policy*, anonymously (Frankfort

1717); *Aufrichtige Nachricht von dem jetzigen Etat des Finantz-Wesens der Republicq des Vereinigten Niederlandes*, anonymously (Cologne 1717); *Aufrichtiger Vorschlag: von glücklicher: vortheilhafter: beständiger: Einrichtung der Intraden: und Einkünfften: der Souverainen: und ihrer Unterthanen* (Frankfort 1729); *Practische Vorschläge welcher Gestalt Steuer und respective Contribution zum Nutzen eines Landesherren*, anonymously (n.p. 1721).

Consut: Zielenziger, Kurt, *Die alten deutschen Kameralisten*, Beiträge zur Geschichte der Nationalökonomie, vol. ii (Jena 1914) p. 391-413, and "Theodor Ludwig Lau" in *Jahrbücher für Nationalökonomie und Statistik*, vol. cxxii (1924) p. 22-34; Mauthner, Fritz, *Der Atheismus und seine Geschichte im Abendlande*, 4 vols. (Stuttgart 1920-23) vol. iii, p. 234-49.

LAUD, WILLIAM (1573-1645), English ecclesiastic. Laud, the son of a small cloth maker at Reading, rose through a series of minor ecclesiastical dignities to the position of archbishop of Canterbury and in that office, which he held from 1633, became the principal adviser of King Charles I. He shared in the king's mistakes and added to them some of his own, including the personal faults of a sharp manner and autocratic temper which had much to do with his downfall and subsequent execution. But essentially the hatred he aroused was due to a conflict of principles in which Laud stood for conceptions no longer applicable in that form to the conditions of English life.

In themselves the ideals to which he devoted his life with complete absence of self-seeking were noble and of ancient lineage: they were the principles that had been laid down majestically by Hooker and derived by him from mediaeval philosophers. Unity was the keynote and the establishment of a humane society on the basis of the revealed divine will the aim. A Christian society was necessarily a unity in which different offices, kingship and episcopacy, equally of divine appointment, performed complementary functions. In this theocratic view religion was something much more than a sentiment of the individual soul: it was the basis of society, the soul of the structure. For Laud government must be the expression and expansion of Christian civilization; otherwise it becomes merely an instrument for the free play of human cupidity.

When acting in the High Commission and the Star Chamber and the other committees that governed after Charles had dispensed with Parliament, Laud set himself, on the one hand, to limit the power of the landlords and to protect the peasants from encroachments and, on the other, to prevent the monopolists from lining

their pockets. Such acts brought him into violent collision with the party of the new rich. He was an advocate of ordinary men against those who would interfere with their simple pleasures. He opposed the Puritan conception of the Sabbath, protected the theater from their attacks and was a great patron of humane learning at Oxford, Dublin and elsewhere. While he cared much for the outward seemliness of worship he was for his time moderate and liberal in theology. The order he wished to impose would have been founded on reason and expressed in beauty. But the day for his methods was over: authority had to discover new bases.

A. S. DUNCAN-JONES

Works: Works, ed. by W. Scott and J. Bliss, 7 vols. (London 1847-60).

Consult: Duncan-Jones, A. S., Archbishop Laud (London 1927); Hutton, W. H., *William Laud* (London 1895); Simpkinson, C. H., *Life and Times of William Laud, Archbishop of Canterbury* (London 1894); Gardiner, S. R., *History of England from the Accession of James I to the Outbreak of the Civil War 1603-1642*, 10 vols. (London 1893-95); Tanner, J. R., *English Constitutional Conflicts of the Seventeenth Century 1603-1689* (Cambridge, Eng. 1928) p. 13-16, and chs. v-vi; Gooch, G. P., *English Democratic Ideas in the Seventeenth Century* (2nd ed. by H. J. Laski, Cambridge, Eng. 1927) p. 79-86; Tawney, R. H., *Religion and the Rise of Capitalism* (London 1926) p. 170-75.

LAUDERDALE, EIGHTH EARL OF, JAMES MAITLAND (1759-1839), English statesman and economist. After studying law in Scotland and Paris Lauderdale entered Parliament at twenty-one. He was at first interested chiefly in the heated political controversies of the period. He was one of the managers of the Hastings impeachment and helped found the Friends of the People. Later he became conservative and in 1832 fought against reform. A critical reading of *The Wealth of Nations*, supplemented by acquaintance with older texts, made of him an economic non-conformist. Unchecked by the academic atavism of Dugald Stewart (whose "separate course" of lectures on political economy at the University of Edinburgh he attended) or the intellectual timidity of Francis Horner, Lauderdale emancipated himself definitely from "the superstitious worship of Adam Smith's name."

Apart from incisive criticism of Adam Smith's more vulnerable opinions upon value and productivity Lauderdale's important doctrinal contributions were: a well reasoned distinction between "public wealth" and "private riches," including recognition of the elasticity of demand; insistence that land, labor and capital are "all

three, original sources of wealth" and "that each has its distinct and separate share" in wealth production; branding of the distinction between "productive" and "improductive" labor as futile; the explanation of capital profit as the "supplanting" of a certain portion of labor; an analysis of debt amortization as injurious to wealth increase; and the view that "a proper distribution of wealth insures the increase of opulence."

Excoriated by Lord Brougham and patronized by McCulloch, Lauderdale's *Inquiry into . . . Public Wealth* was translated into French and Italian and received more favorable recognition from Cossa as well as from Cannan. Prolix in style, fragmentary in exposition, intolerantly critical, his book is important in the development of English and, through Daniel Raymond, of American economic thought, not only as perhaps the most substantial theoretical contribution in the score of years between Malthus' *Essay* and Ricardo's *Principles* but also as the final attempt to construct a theory of production before the later classical school became absorbed in the theory of distribution.

JACOB H. HOLLANDER

Important works: Thoughts on Finance (London [1796]; 3rd ed. 1797); *An Inquiry into the Nature and Origin of Public Wealth, and into the Means and Causes of Its Increase* (Edinburgh 1804; 2nd ed. enlarged, 1819); *The Depreciation of the Paper Currency of Great Britain* (London 1812); *A Letter on the Corn Laws* (London 1814).

Consult: McCulloch, John R., The Literature of Political Economy (London 1845) p. 15-16; Cossa, Luigi, *Introduzione allo studio dell' economia politica* (3rd ed. Milan 1892), tr. by L. Dyer (London 1893) p. 321-22; Cannan, Edwin, *A History of Theories of Production and Distribution* (3rd ed. London 1924).

LAUNDRY AND DRY CLEANING INDUSTRY. The cleaning of soiled garments is one of the most ancient and homely of tasks. The early methods were washing in a stream or pool or, more elaborately, treading with feet or rubbing with hands in a bowl, drying on a frame and combing of dried woolen fabrics. These cleaning methods still prevail in many parts of the world today. In Rome and in some of the Roman cities during the early empire there were commercial laundries which had yearly contracts for family wash, doing the work by hand at a comparatively low cost; patronage was necessarily limited to the noble and wealthy classes. During the Middle Ages woolen clothes, which were used by the bulk of the population, were occasionally laundered in a rough fashion, although in many

instances garments were worn without washing until they wore out. When cotton came into general use in the latter part of the eighteenth century more careful methods of hand laundering were developed.

Not until well into the nineteenth century, however, was there any radical change from the old custom of hand laundering performed as a separate task in each home. By 1860 there were a few steam laundries in Great Britain and the United States; these increased in number toward the close of the century. The first wash wheel, the prelude to many mechanical appliances necessary for the power laundry industry, was patented in the United States in 1863. Early patronage came from ships and hotels, while the first items relinquished to laundries by housewives were men's shirts and collars, difficult to do at home because of the elaborate starching required. Laundering in the United States as well as in European countries was until 1915 chiefly a shirt and collar business with a slowly growing family trade. The wet wash service, which washes clothes and returns them damp, was started in New England about 1910 and spread from there to New York and Chicago. Eight years later laundries began to offer in addition to the wet wash a flat work service for a small extra charge and about 1920 came the rough dry service (flat work processed; wearing apparel washed, dried and starched if desired). Today there are seven recognized types of service, representing a considerable range of expensiveness. These services, carefully designed to meet varying requirements, have drawn forth an increasing volume of family bundles.

There was a somewhat similar development in dyeing and dry cleaning. Dye works have existed in the United States for over fifty years; at least two were established much earlier. In the days when a silk dress was sufficiently valuable to be ripped apart, dyed and remade, dyeing was the chief function of such establishments; dry cleaning was taken on later as a side issue. From this minor position in the first decade of the present century dry cleaning has grown to one of complete dominance and today accounts for about 95 percent of the total volume of the dyeing and cleaning business.

Expansion in the laundry and dry cleaning industry was accompanied by mechanization and specialization of processes. The ironing of one shirt may now be accomplished by a half dozen machines and as many as ten persons. Dry cleaning, formerly a matter of swishing a

garment in a tub of gasoline, has become a process of "watching dials and regulating valves, stills, centrifugal machines and motors." The consequent improvement in service and lowering of prices has resulted particularly since the turn of the twentieth century in an extraordinary growth of business. Receipts for work done by power laundries reporting to the United States Bureau of the Census (excluding "hand" laundries even though they use some power equipment) rose from \$104,680,000 in 1909 to \$541,158,000 in 1929 (excluding in 1929 establishments doing less than \$5000 annual business). Recognition by the United States government for cleaning of army clothing and bedding during the war gave a great stimulus to the cleaning and dyeing industry; receipts from establishments using mechanical power reporting to the Census Bureau (excluding pressing and tailor shops) rose from \$53,183,000 in 1919 to \$201,255,000 in 1929 (excluding in both years establishments doing a business of less than \$5000). These figures are an underestimate, as at least one seventh of the laundries and even more of the cleaning and dyeing establishments failed to make census reports. The minimum of \$742,000,000 spent in 1929 for cleaning, dyeing and laundry work, equal to more than one tenth of expenditures on the purchase and operation of privately owned automobiles, indicates the scope of the industry and the impressive change in the habits of consumers.

Outside the United States the highest development has been achieved in Great Britain, where the value of work done by power laundries and cleaning and dyeing establishments combined (including a few hand laundries) rose from £9,380,000 in 1907 to £21,050,000 in 1924 (including Ireland in the former year and excluding the Irish Free State in the latter; the value of work done in the Irish Free State in 1926 was only £470,000). In Canada a total business of \$16,353,000 was done by steam laundries in 1929; in the same year the business of cleaning and dyeing establishments amounted to \$6,689,000. In Great Britain cooperative laundering—an outgrowth of cooperative societies formed for other purposes—is of some importance, such laundries handling approximately 5 percent of the total laundry business.

In continental European countries there are some commercial laundries and dry cleaning establishments but the amount of work performed by them is, even relatively, much smaller than in the United States and Great Britain.

The great majority of housewives still do their laundry work in the home, with the exception of a small volume of shirts and collars. Wage earning families, because of limited income, are unable to patronize laundries; middle class families do not send clothing out but employ women to come to their homes, paying for such services according to the low scale of wages for domestics. In the large cities some apartment houses provide special rooms and equipment for the residents' laundry activities. Customers of laundries are therefore chiefly hotels, restaurants, hospitals and other institutions. In Germany, however, the industry is of considerable importance, the value of the work done by power laundries amounting to 135,000,000 marks in 1929. Some indication of the scope of the laundry and cleaning business in foreign countries is afforded by their imports of American laundry and dry cleaning machinery and equipment; 71 countries imported \$3,418,759 worth of such machinery in 1930, \$1,241,000 going to the United Kingdom, \$669,000 to Canada and \$515,000 to Germany.

The laundry and dry cleaning industry is composed of essentially small scale enterprises because of the character of the service and the recent rapid expansion, which attracted many petty entrepreneurs. This is particularly true in Europe, where the majority of laundry and dry cleaning establishments are in the hands of small individual owners. In the United States, however, the tendency is increasingly toward corporate ownership. In 1919, 60 percent of the total volume of power laundry business was done in plants of corporate enterprises, and the proportion rose to 74 percent in 1929. The individual owner in the dyeing and cleaning business, on the other hand, remains relatively stronger: only 51 percent of the business in 1919 and 56 percent in 1929 were done by corporate establishments. The corporate units, it is true, are not very large but there is a distinct trend toward concentration and combination. This is apparent in the increasingly large size of plants, a development which is more marked in laundries than in dyeing and cleaning establishments. The increase in the number of cleaning and dyeing establishments has more nearly kept pace with the increase in horse power used and wages paid than in the case of laundry plants, indicating more small competing establishments than in the power laundry business. Nevertheless, concentration is increasing in both branches of the industry. The percentage of total business

done by establishments having an annual volume of less than \$20,000 has decreased, while that done by establishments with an annual volume of over \$100,000 has increased substantially; the latter figure in 1929 was 64 percent for laundries and 40 percent for cleaning and dyeing establishments.

Despite the trend toward large establishments and concentration of ownership many small shops persist, particularly the so-called hand laundries and press shops, which are not enumerated in the census and which are important especially in the larger cities. These small, highly competitive establishments, located at accessible points in residential districts, serve as feeders for power plants; they receive soiled clothing, which is then sorted and marked, sent on to power laundries for washing and returned to the hand laundries for varying degrees of finishing. Similarly wholesale dry cleaning plants send trucks to collect clothes left at press shops; the clothes are cleaned at the plant and in most cases returned rough dry to the press shops, where the pressing and finishing are completed. It is estimated in the trade that there are about twenty press shops for every central cleaning establishment. The Chinese laundries are the only ones in America which do any extensive laundering by hand. In England, on the contrary, the cleaning and dyeing and laundry plants deal direct with their customers. In other European countries the number of hand laundries and press shops is relatively small because the amount of family trade is limited.

The development of the laundry industry has been closely linked with technical improvements in the manufacture of textiles. Research in textiles and chemicals has constituted a major part of the program of the American trade associations, the chief evidence being the \$750,000 plant at Joliet, Illinois, which houses the American Institute of Laundering, and the National Association Institute of Dyeing and Cleaning at Silver Springs, Maryland. These institutes conduct chemical and engineering research, operate commercial proving plants and vocational training schools and solicit cooperation from textile manufacturers. The British Launderers' Research Association looks forward to the establishment of a similar research institute. Substantial improvement in the quality of textiles has resulted from the laundry industry's research work, which has disclosed laundering difficulties due to loose weaves, unevenness in quality of filling threads and yarns, poor dyes,

chemicals used in the discharging process of printing color designs and stretching of threads to produce greater yardage; the industry also urges manufacturers and retailers to use its testing facilities.

The transfer from the home to the laundry of a substantial portion of the weekly washing and ironing, facilitated not only by the lower prices of such services but by the increase of women in industry and the comparatively high wages of domestic servants, is in keeping with the trend of other household activities, such as sewing, baking, canning and preserving, from the isolated home to central establishments, where large scale methods can be employed, and is fraught with far reaching social implications. The transition, however, is as yet only in the initial stage. In the United States and Great Britain, the two countries where the industry is most advanced, various estimates show that of the urban business which may be regarded as well within the range of commercial laundries certainly less than 25 percent is now being sent to laundries. In America more than England, where this type of business is specially solicited, women withhold finer articles, such as silks and laces, from the laundry bundle. The larger the community, the larger is the proportion of homes where the family wash is sent to power laundries. Middle class families constitute the most substantial patrons of the laundries: the great majority of working class families are unable to patronize the laundries, while in the highest income groups paid workers do the laundering in the homes. There is rough agreement between size of family income and patronage of laundries and type of service selected, although this is not always the case. The wet wash, the cheapest service, is patronized by the rich, whose servants are willing to iron but refuse to wash the family clothing. A very small proportion of rural homes send work to power laundries, although delivery service is now reaching wider areas than formerly. Per capita consumption of dry cleaning apparently varies widely with the section of the country; it is negligible in the rural districts and is highest in the medium sized and large cities of the middle west.

The countermovement to commercial service, the introduction of washing machines into the home, appears to be an anomalous reversal of this trend toward simplification of the housewife's tasks. One estimate is that 35 percent of the electricity consuming families of the United States owned electric washing machines as of

January 1, 1931; 810,000 electric washing machines were sold in 1928, 1,019,000 in 1929 and 802,000 in 1930. In farming communities more families own some kind of washing machine than use the services of commercial laundries.

Shifting of laundry work from the individual home to central plants raises new questions of sanitation for the consumer and for the community. Much prejudice against the commercial laundry has rested upon the aversion to having one's personal clothing washed in the same waters with those of the general public. A number of investigations by impartial authorities indicate that the only difficulties arise from use of improper frame houses not suited for the work (typical of earlier days but less frequently used now), from packing too tightly the loose nets in which clothes of one type from one family are washed (practised only in the poorer grade laundries), from improper handling of clean clothes in juxtaposition to incoming soiled clothing and from the personal danger of infection to sorters and markers, who must handle the incoming garments. It has been well established that the temperatures and processes through which clothes pass in a modern commercial laundry are sufficient to destroy the most virulent bacteria and that clothes emerge absolutely sterile. In a well equipped modern laundry the receiving and marking room is kept entirely separate from the rest of the laundry, and workers there are protected by enveloping aprons and gloves. In the hand laundries, however, the clothing may be subject to reinfection after washing because inadequate drying and ironing space sometimes encroaches on crowded living quarters attached to the establishment and because clean and soiled clothing are sometimes handled over the same counters. In a report made by an officer of the New York City Department of Health in 1917 the Chinese hand laundries in New York City were found to be far cleaner in this respect than the "hand" laundries operated by white persons. Since 1905 France has required that incoming bags of soiled linen shall be disinfected before being touched by the workers; in the United States, however, attempts to require disinfection of incoming laundry before handling by the workers have been effectively opposed by the laundry owners, who claim that the expense would be prohibitive. American commercial laundries refuse to accept clothing from homes where a contagious disease is placarded and unusually filthy clothing is sometimes returned or burned and paid for

instead of being washed. There is considerable difference between the practise of the best and the worst laundries with respect to scrupulousness of handling and general standards, and the laundry industry itself is attempting to certify those laundries which have satisfactory standards.

The laundry industry in the United States, according to the 1929 Census of Manufactures, employs over 230,000 wage earners, a twofold increase over 1909, and the dyeing and cleaning industry employs 60,000, a threefold increase over 1919. Despite the introduction of machinery a great portion of the work requires but limited training and skill. The sorting, folding and even ironing of the clothing is relatively easy work. The substances handled and the processes accomplished are but partially changed from home methods and thus women from the home readily adapt themselves to the work. Because laundering is a service industry, laundry plants are widely distributed, thus utilizing surplus labor in all areas and prohibiting the concentration of workers in a particular region. All these factors contribute to determine the type of labor force. Women of advancing years knowing no other work than that of the home or unable to perform more difficult tasks are able to find laundry work near their homes. In 1929, 67 percent of the wage earners were women, a decrease from 71 percent in 1919. Negro women because of custom and lack of training and opportunity are especially barred from many other occupations and as a consequence constitute over 25 percent of the laundry workers; they receive considerably lower wages than white women workers. Female labor also predominates in Europe.

The competitive disadvantages of the workers, the decentralization of the industry and the physical nature of the work combine to produce and perpetuate many unsatisfactory working conditions, although there have been some improvements. Work in the wash rooms, often concentrated in the early days of the week, is done largely by men, is very heavy and is usually performed in high temperatures and great humidity. These conditions may result in cardiac strain with serious results. The ironers are for the most part women, and there is a tendency for their work to be concentrated later in the week after washing and drying are completed; here the excessive temperature and humidity give a predisposition to atrophic condition, conjunctivitis, dizziness and headache. It has been

found that the long hours of standing, the working of treadle machines and the carrying of heavy stacks of clothes are conducive to flat foot and varicose veins.

In the cleaning and dyeing industry somewhat greater skill is required for work such as pressing of fine silk dresses. Women have constituted a considerably smaller fraction of the total wage earners than in the laundry industry: 44 percent in 1919 and 39 percent in 1929. In general, however, the factors operative in the laundry industry apply here as well. Occupational hazards in the dry cleaning industry include toxicity of solvents used (although practical appliances have greatly reduced possible dangers), injury from certain chemicals necessitating cautious handling, lesions of the skin resulting from dyes and discomforts arising from heat, odors and steam in the pressing rooms.

Wages paid to laundry workers are low and inadequate. Median annual wages for women laundry workers in New York state were \$769 in 1926. In 1928 a large sample studied by the Department of Labor showed median weekly wages for the United States to be \$14.65 for all women workers, \$16.10 for white women workers and \$8.85 for Negro women. These are among the lowest wages paid to any industrial group. Not only are the actual and potential supplies of laundry workers large but the nature of the demand for the service also contributes to perpetuate low wages. Since the great growth of the laundry industry has been based on removing the washing from the home, the price factor is a very vital one; the wage bill constitutes a large portion of the cost of operation and must be kept low if the housewife is to be induced to send her washing out.

In the absence of state regulation the hours of work in laundries have been long. But since it is customary for states to exercise some control over the hours worked by women and since women constitute such a large proportion of laundry workers, protection is provided for most laundry workers. Nevertheless, hours of work scheduled are usually about the maximum permitted by law and the hours worked are longer than in most occupations in which women are extensively employed. The United States Women's Bureau found that in 1927-28 the most common schedule for women was 48 hours per week (34.8 percent) but that 51.6 percent worked over 48 hours and 13.7 percent over 54.

Unionization has not been extensive either among the laundry workers or among the clean-

ers and dyers. In the dry cleaning industry unions have been organized only in a few of the larger cities. Some of the locals are affiliated directly with the American Federation of Labor, while others are under the jurisdiction of the Laundry Workers' International Union or the Journeymen Tailors' Union; the former union, affiliated with the American Federation of Labor, reports a nominal membership of some 6000. Certain radical groups have taken some steps toward organizing the industry but the results have not been noteworthy. Collective bargaining is almost non-existent. In New York City, however, the Cleaners and Dyers Board of Trade and two unions formed in 1932 a conference board to minimize disputes, composed of representatives from the various factors in the industry with an outside chairman. Strikes are rather frequent and usually bitterly contested but do not result in permanent organization. The large proportion of women and Negro workers, the unskilled character of the work, the decentralized and competitive nature of the industry, all these factors spell defeat for unionism. This condition prevails also in Europe; thus in Germany in 1929 approximately 25 percent of the laundry workers were organized, but the proportion declined to 5 percent three years later.

In contrast to the weak state of organization among the workers the employers are comparatively well organized. An association of laundry owners was organized as early as 1880 in Lawrence, Massachusetts. In 1929 there were thirty-three state and interstate associations of employers in addition to many local boards of trade or associations, as they are variously called. They perform the usual functions of trade associations; primarily they act together to influence legislation, oppose organized labor and subsidize research on technical problems of the industry. Occasionally the associations promote cooperative advertising campaigns; thus in 1927 the Laundryowners' National Association of the United States and Canada launched a \$5,000,000 campaign which continued until March, 1932. The National Association of Dyers and Cleaners of the United States and Canada has engaged on a somewhat smaller scale in activities similar to those of the organized laundry owners. In Great Britain the National Federation of Launderers holds annual congresses, fosters an allied research association and promotes an educational movement within the industry. Similar associations exist on the continent, but they are

much less developed than in the United States; thus in Germany in 1929 the Deutscher Wäscherei Verband had only 1500 members for 7000 laundries.

Although the employers' associations are largely successful in their efforts to combat unionism they have been unable to crush the racketeering which exploits the American laundry and dry cleaning industry. The product of the industry is a renovating service rather than a physical value added to a raw material; it has a high proportion of direct costs; and it is more closely subject to direct requirements of ultimate consumers than most industries, with consequent scattering of establishments throughout the entire country to serve local groups of customers. High direct costs, lack of the steadying influence of a market from which raw materials are bought and the small size of the many scattered establishments make the industry a likely field for cut-throat competition and its American concomitant, racketeering. Price wars and fights for patronage in many large cities, especially Chicago and New York, have been accompanied by bombing of undefended delivery wagons, an important part of the capital equipment, and other forms of terrorism. A combination of racketeering labor unions, retailers' unions and wholesalers' unions in Chicago maintained prices and divided patronage, until an independent cleaner failing to receive aid from the state hired a notorious gangster to protect his business—and intrenched racketeering more securely in the industry. In other cities tribute from outside the industry is also exacted; laundry and cleaning shops, especially those owned by independent foreigners, are terrorized into making regular payments to racketeers for "protection," the alternative being violence and other forms of intimidation which end in submission or destruction of the recalcitrant's business. The situation has improved somewhat since 1930, but the fundamental conditions which make racketeering profitable still remain.

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See: HOME ECONOMICS; DOMESTIC SERVICE; WOMEN IN INDUSTRY; SANITATION; RACKETEERING.

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LAURIER, SIR WILFRID (1841-1919), Canadian statesman. Laurier, a descendant of seventeenth century colonists from France, was educated at L'Assomption College and at McGill University, where he studied law. After several years in the provincial legislature of Quebec he entered dominion politics as minister of inland revenue in the Mackenzie government. From 1887 to 1896 Laurier was leader of the Liberal opposition, succeeding Edward Blake. He was prime minister of Canada from 1896 to 1911, an unbroken term of office unequalled before or since, which covered a period of great economic expansion fostered by the government. The aggressive immigration policy of the minister of the interior Clifford Sifton filled the west with settlers of many nationalities, and an overoptimistic railway policy designed to encourage expansion of settlement northward and to link east and west more closely resulted in the construction of the Grand Trunk Pacific and Canadian

Northern transcontinental systems. But the special distinction of Laurier, who admired the policies of moderation and orderly reform of Gladstone and the English Whigs and who shared in the main their views on economic and social questions, rests chiefly upon his lifelong work for the conciliation of racial, religious and sectional interests in Canada and of nationalist and imperialist aims. In his early years he fought courageously against the efforts of ultramontane clericals to dominate the public life of his native province and as a disciple of Lacordaire insisted that it was possible to be at once a good Liberal and a good Catholic. He came into office on an issue arising from the federal government's attempt to annul Manitoba's abolition of separate schools for Roman Catholics; he upheld negotiation as against coercion and arranged a compromise assuring the Catholic minority of certain privileges within the framework of the public school system. Despite some early wavering he opposed schemes of imperial federation and aided the steady but unspectacular consolidation of Canadian autonomy while playing an important part in developing the system of co-operation which later took form in the British commonwealth of autonomous nations. As a concession to a wave of imperialist sentiment he dispatched Canadian detachments to participate under imperial control in the Boer War; in later incidents he insisted on Canada's control of its own forces. It was his administration which instituted the system of imperial tariff preferences in 1897. Nevertheless, arguments based ostensibly on his attitude toward national and imperial loyalties contributed largely to the defeat of Laurier's government in the general election of 1911. Laurier's policy of building a modest Canadian navy was attacked both by the Nationalists in Quebec, who wanted no action, and by imperialists, who preferred contributions to the British navy. It was feared moreover that undesirable political and economic effects would follow his reciprocity agreement with the United States. Laurier approved Canada's participation in the World War but opposed conscription; his adherents were defeated on this issue in the general election of 1917.

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LAVAL, FRANÇOIS XAVIER DE (1623-1708), French ecclesiastic and bishop of Quebec from 1674 to 1688. Laval may rightly be called the founder of the Roman Catholic church in Canada and one of its greatest statesmen. He was trained by the Jesuits in France and in 1659 was sent out to New France as apostolic vicar with the functions and powers of a bishop *in partibus infidelium*. Strongly ultramontane in outlook and determined that the church should not be hindered in Canada by the Gallican influences then gaining control in France, he successfully urged the establishment of the bishopric of Quebec as an immediate dependency of the Holy See rather than of the archbishop of Rouen. Although he was unable to frustrate the triumph of the temporal power in New France, he did succeed in protecting the Canadian church itself from the Gallican influences prevalent in the mother country. This stimulated the growth of an independent French Canadian nationalism, which became a force to be reckoned with under British rule. By making the church directly dependent upon the Papal See and by giving unity to the ecclesiastical forces Laval undoubtedly did more than any other to further ecclesiastical control in Quebec. His efforts in the interest of education and a more enlightened treatment of the natives were essentially an outgrowth of his struggle for ecclesiastical supremacy. He was responsible for the founding in 1663 of the Seminary of Quebec, now Laval University, and of a preparatory school for boys in 1668. He also encouraged elementary education, so that by 1685 nineteen educational institutions had been established. Laval's zeal for the spiritual and material welfare of the Indians led him into frequent clashes with the local secular authorities. Both by legislative measures and by excommunication he sought to restrain the traders, especially in their sale of brandy to the natives. Although the liquor trade could not be suppressed, the general principles which were enunciated by Laval laid the foundations of Canadian legislation for the protection of the Indians.

WALTER A. RIDDELL

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LAVELEYE, ÉMILE LOUIS VICTOR DE (1822-92), Belgian economist, political scientist and historian. Laveleye studied philosophy at the University of Louvain and law at the University of Ghent; in the latter institution he came under the influence of François Huet, the French apostle of "liberal Catholicism." Laveleye was already well known as an economist and essayist when in 1864 he was called to the professorship of political economy at the University of Liège, a position which he filled until his death.

Laveleye's economic views were fundamentally those of the socialists of the chair. Actuated by ethical considerations, he turned from the realm of pure theory to that of social reform. He refuted the theory, current at the time, of the immutability of private property and established the evolutionary character of the institution of property. Essentially a believer in individual initiative and private enterprise, he stressed the social responsibilities of property, was clearly conscious of the social dangers of excessive individualism and in his famous polemic with Herbert Spencer vigorously asserted the right of the state to intervene wherever private interests seem to run counter to the interests of society. He remained a convinced bimetallist even after the failure of the international monetary conferences. Although free trade was the accepted theory at the time, he never subscribed to it entirely.

In the realm of political science Laveleye's interest centered in the problem of democracy. His *Le gouvernement dans la démocratie* (2 vols., Paris 1891; 2nd ed. 1892), which has been sometimes compared to Montesquieu's *Esprit des lois*, is both a study of and plea for the democratic form of government. An ardent Christian and an admirer of democracy, he identified "true" Christianity with "true" democracy and ascribed the resurgence of the democratic spirit in the modern era to the renaissance of true Christianity as expressed in the Protestant revolt.

While he unqualifiedly believed in the superiority of democracy over any other form of government he clearly realized the incompatibility of political equality with economic inequality and regarded a more equitable distribution of wealth as an essential prerequisite to the effective functioning of democracy.

Laveleye's mind was of encyclopaedic scope. He wrote widely on socialism, contemporary political problems and international law. After the Franco-Prussian War he studied carefully the causes of war and advocated arbitration of international disputes. He was a convert to Protestantism and wrote a number of articles in which he attempted to prove the superiority of Protestant over Catholic nations. His letters and the various accounts of his travels are also noteworthy.

Laveleye played no active part in the political life of his country; nevertheless, his democratic and liberal ideas had an enormous influence upon the people of his time.

ERNEST MAHAIM

Important works: *Études historiques et critiques sur le principe et les conséquences de la liberté du commerce international* (Paris 1857); *De la propriété et de ses formes primitives* (Paris 1874, 5th ed. 1901), tr. by G. R. L. Marriott (London 1878), and tr. into German with supplementary material by Karl Bücher as *Das Ur-eigenthum* (Leipsic 1879); *Des causes actuelles de guerre en Europe et de l'arbitrage* (Paris 1873), tr. as "On the Causes of War . . ." in *Cobden Club Essays, Second Series* (London 1872) p. 1-55; *Le socialisme contemporain* (Brussels 1880, 10th ed. Paris 1896), tr. by G. H. Orpen (London 1884); *Éléments d'économie politique* (Paris 1882, 6th ed. 1898), tr. by A. W. Pollard with introduction by F. W. Taussig (New York 1884); *La Prusse et l'Autriche depuis Sadowa*, 2 vols. (Paris 1870); *La péninsule des Balkans*, 2 vols. (Brussels 1886); *La monnaie et le bimétallisme international* (Paris 1891, 2nd ed. 1891); *Essais et études*, 3 vols. (Paris 1894-97); *Lettres intimes* (Brussels 1927).

Consult: Ernest Mahaim, in *Revue d'économie politique*, vol. vi (1892) 93-101; Goblet d'Alviella, A. J., "Émile de Laveleye, sa vie, son oeuvre" in *Académie Royale de Belgique, Annuaire* (1895) 45-246, with bibliography.

LAVERGNE, LOUIS-GABRIEL LÉONCE DE (1809-80), French economist and politician. After directing the *Journal de Toulouse* and teaching literature at the University of Montpellier Lavergne went to Paris in 1840 as Charles de Rémusat's *chef de cabinet* in the Ministry of the Interior. In 1844 he became an official in the Ministry of Foreign Affairs under Guizot and in 1846 he was elected to the Chamber of Deputies. His political activity was interrupted by the Revolution of 1848 and was not resumed

during the Second Empire. He was elected to the National Assembly as an Orleanist in 1871 but, convinced that the restoration of monarchy was impossible, he became a leading proponent of the constitution of 1875. Lavergne was made senator for life in 1875, and he staunchly defended the republic when it was threatened on May 16, 1877.

He became interested in agricultural economics while professor at the Institut Agronomique at Versailles from 1850 to 1852 and is important chiefly as an innovator in developing the separate study of the economic structure of agricultural life. His vivid descriptions of contemporary rural economy in Great Britain and France are based on sound statistical data, regional and geographical investigations and historical method; and his discussions of the theory of gross income in agriculture led to the development of new accounting methods in that field. Lavergne was also interested in population questions and banking.

HENRI SÉE

Important works: *Essai sur l'économie rurale de l'Angleterre, de l'Écosse et de l'Irlande* (Paris 1854, 4th ed. 1863), English translation (Edinburgh 1855); *Économie rurale de la France depuis 1789* (Paris 1860, 4th ed. 1877); *L'agriculture et la population* (Paris 1857, 2nd ed. 1865); *Les assemblées provinciales sous Louis XVI* (Paris 1864); *Les économistes français du dix-huitième siècle* (Paris 1870).

Consult: Cartier, Ernest, in *Revue des deux mondes*, vol. xx (1904) 825-61.

LAVISSE, ERNEST (1842-1922), French historian. Deeply impressed by the French defeat of 1871, Lavissee, who six years earlier had completed with unusual distinction his studies at the École Normale Supérieure in Paris, went to Berlin, where over a period of four years (1871-75) he devoted himself to an intensive study of German history and government. After finishing his doctoral thesis, *Étude . . . ou la Marche de Brandebourg sous la dynastie ascanienne* (Paris 1875), he returned to Paris and at the École Normale (1878) and later at the Sorbonne acquired an ever mounting reputation as educator and historian. At the end of his career he was director of the École Normale Supérieure. His interest in German history, which persisted actively until 1893, was concentrated on three great epochs: the Middle Ages, the age of Frederick the Great and the nineteenth century. His delineation of the Prussian king in *La jeunesse du grand Frédéric* (Paris 1891, new ed. 1916) and *Le grand Frédéric avant l'avènement* (Paris

1893) won for Lavissee election to the Academy in 1892 and has become a classic of French historical literature. His writings on nineteenth century Germany include *Essais sur l'Allemagne impériale* (Paris 1887), *Trois empereurs d'Allemagne* (Paris 1888) and *La question d'Alsace-Lorraine* (in collaboration with C. Pfister, Paris 1918; English translation London 1918). In the realm of French history Lavissee's reputation rests primarily on his editorial enterprise. With Alfred Rambaud he was coeditor, although comparatively inactive, of *Histoire générale du 19^e siècle à nos jours* (12 vols., Paris 1892-99). His most significant work in this field was as editor of *Histoire de France depuis les origines jusqu'à la Révolution* (9 vols., Paris 1900-11) and *Histoire de la France contemporaine depuis la Révolution jusqu'à la paix de 1919* (10 vols., Paris 1920-22), constituting essentially a single monumental series which assembled contributions from the foremost historical scholars of France—Vidal de la Blache, Rébelliau, Luchaire, Pfister, Langlois, Pariset, Charléty, Seignobos and others. Lavissee's own contribution to this series, a severe indictment of Louis XIV, is characteristically analytical and synthetic in method and by its unquestioned force and prestige has been a great factor in dissipating the glamour with which Voltaire and Michelet had hedged *le roi soleil*.

PHILIPPE SAGNAC

Consult: Girard, Georges, "Essai de bibliographie de l'oeuvre de M. Ernest Lavissee" in *Maison du Livre Français*, *Bulletin*, vol. ii (1923) 286-88; Langlois, C. V., in *Revue de France*, vol. v (1922) 471-83; Seignobos, C., in *Revue universitaire*, vol. xxxi (1922) pt. ii, 257-64; Sagnac, P., in *Flambeau*, vol. v, pt. iii (1922) 10-20; Guerlac, O., "Ernest Lavissee, French Historian and Educator" in *South Atlantic Quarterly*, vol. xxii (1923) 23-42; Bécheyras, A., "M. Lavissee, historien du grand siècle" in *Revue critique des idées et des livres*, vol. xxxiii (1913) 142-61; Andler, C., "La dernière oeuvre d'Ernest Lavissee" in *Revue de Paris*, vol. xxx (1923) pt. i, p. 303-40.

LAVOISIER, ANTOINE LAURENT (1743-94), French chemist and financial administrator. Lavoisier, the founder of modern chemistry, is important in the history of the social sciences for his economic and statistical writings, in particular for his *De la richesse territoriale du royaume de France*. The son of a lawyer of moderate means, Lavoisier bought in 1768 a share in the farmers' company of indirect taxation and thus shared responsibility for a fiscal system severely condemned by both French and English observers for its exorbitant profits and opposi-

tion to the interests of the people. At the same time, however, Lavoisier was influenced by the ideas of the physiocrats and labored for many years on projects which aimed to rehabilitate French agriculture. He successfully conducted an experimental farm and was a leading figure in the committee on agriculture organized by Calonne in 1783. The memorandum of instructions for the deputies of Blois to the Estates General of 1789 drawn up by Lavoisier was also highly liberal and reformist in spirit. During the first years of the revolution Lavoisier served as one of the commissaries of the Treasury, organizing the system of accounting from which dates the real beginning of the French budget. He was executed during the Terror together with the other members of the *Ferme générale*, who were accused of defrauding the state.

De la richesse territoriale . . . de France, which was printed in 1791 by order of the National Assembly, constitutes an extract from a larger work on which Lavoisier had been engaged since 1784 in an effort to complete and verify an analysis of national income undertaken by Dupont de Nemours. Lavoisier's main argument is that the monetary valuation of national income from different sources leads to double counting; that the only method exempt from such difficulties is that based on an estimate of annual consumption, since exports and imports in France balance one another; and that in estimating consumption allowance must be made for the variation in the budgets of different social classes. Thus he estimated that the annual per capita income of the poorest families is from 60 livres to 70 livres, but he set the value of average per capita income at 110 livres, a figure admittedly similar to that of Quesnay in his *Philosophie rurale* (1763). It was derived by Lavoisier from a hypothetical budget for a family of five, in which the father's consumption is valued at 250 livres (an amount equal to the soldier's pay in the French army) and the mother's consumption and the aggregate consumption of the children each at two thirds of the father's. For a population of 25,000,000 he deduced a total consumption income of 2,750,000,000 livres. The net national income, computed by estimating the net revenue in the various branches of agriculture, he put at only 1,200,000,000, of which half goes to the treasury in the form of taxes and the rest constitutes the landowners' rent.

STEPHEN BAUER

Works: *Oeuvres de Lavoisier*, 6 vols. (Paris 1862-93),

of which vol. vi contains all the economic and statistical writings. See also *Statistique agricole et projets de réformes*, ed. by E. Grimaux and G. Schelle (Paris 1894), containing the principal economic and statistical writings of Lavoisier; *Mélanges d'économie politique*, ed. by E. Daire and G. de Molinari, 2 vols. (Paris 1847-48), vol. i, p. 575-607, containing selections from Lavoisier.

Consult: Grimaux, Édouard, *Lavoisier* (Paris 1888); the introductions by E. Grimaux and G. Schelle to their edition of *Statistique agricole*, p. i-lvi; Foster, Mary L., *Life of Lavoisier*, Smith College Monographs, no. i (Northampton, Mass. 1926).

LAVROV, PETR LAVROVICH (1823-1900), Russian social philosopher. Lavrov, the son of a retired colonel, taught higher mathematics at a military academy in St. Petersburg from 1844 to 1866, contributing at the same time to technical, educational and literary publications of a liberal tendency. In the drive on radicals which followed Karakozov's attempt on the life of Alexander II, Lavrov was arrested and eventually banished to the province of Vologda in the north; in exile he wrote the famous "historical letters" (German tr. by S. Dawidow, Berlin 1901; French tr., Paris 1903) which made him very popular with revolutionary youth. In 1870 Lavrov escaped abroad, where he developed into a convinced socialist, continuing to exercise a powerful influence on Russian revolutionary intelligentsia. During the years 1873 to 1876 he edited a socialist review, *Vpered* (Forward), in which he developed the ideology of the "propagandists"; this group, unlike Bakunin and his followers, who preached insurrectionism based on revolutionary mass instincts, believed that the people must be prepared for revolutionary action by political and social education. Later, when the political situation in Russia changed, he edited together with Tikhomirov the organ of the terrorist party, *Narodnaya volya* (People's will, 1883-86). At the same time he continued to write on general sociological and historical questions; among his later works the most important to be mentioned are *Opit istorii misli novogo vremeni* (An essay on the history of modern thought, Geneva 1888-94), *Zadachi ponimaniya istorii* (The problems of historical understanding, Moscow 1898) and *Glavneyshie momenti istorii misli* (Principal periods in the history of thought, Moscow 1903).

Immensely erudite, Lavrov drew upon Kant and Comte, Hegel and Feuerbach. Proudhon and Marx, to construct a *Weltanschauung* which he called anthropologism and which is the first and most important system of Russian subjective

sociology. The center of this system is the human individuality. Man like his animal ancestors begins with the pursuit of pleasure and the avoidance of pain, with the purely selfish gratification of elementary needs, such as those for food, sexual satisfaction and nervous stimulation; on this basis, however, there develop altruistic effects, such as a sense of justice, mercy and the capacity for self-sacrifice as well as critical thought. Primitive human societies, not essentially different from animal societies, are held together by usages and customs which tend to become fixed and sacred; these constitute culture whose progress toward civilization involves the operation of critical thought. The carrier of critical thought is the intelligentsia; and since progress is achieved at the cost of terrible suffering to mankind it is the duty of every intellectual to repay his debt to humanity by consecrating his life to social ends. The human individuality is the real agent of historical movement; although the course of history is determined by objective forces, the individual acting upon his own interpretation of the historical process, which is in its very nature subjective, sets his own goals and chooses his own means, thereby transforming the objectively inevitable into acts of personal will. Thus originates a subjective notion and ethical appreciation of progress, which Lavrov described as the physical and moral development of personality and the concomitant embodiment of truth and justice in social institutions. Modern socialism, rejecting every religious and metaphysical idea and involving collaboration between the intelligentsia which provides the leadership and the large masses of workmen and peasants, affords the shortest way to this goal; the new society will be based on solidarity just as the capitalistic order is dominated by interest and primitive society is dominated by tradition.

NICHOLAS RUSANOV

Consult: Rusanov, N. S., *Sotsialisti Zapada i Rossii* (The socialists of the west and Russia) (St. Petersburg 1908) p. 200-66; P. L. Lavrov, *Sbornik statey* (P. L. Lavrov, a collection of articles) (Petrograd 1922); Rappoport, C., Introduction to *Historische Briefe*, and Goldsmith, M., bio-bibliographical notice in *Lettres historiques*; Masaryk, T. G., *Zur russischen Geschichts- und Religionsphilosophie*, 2 vols. (Jena 1913), tr. by Eden and Cedar Paul as *The Spirit of Russia*, 2 vols. (London 1919) vol. ii, ch. xv; Hecker, Julius F., *Russian Sociology* (New York 1915) pt. ii, ch. i; Tcheskis, L. A., "La philosophie sociale de Pierre Lavroff" in *Revue de synthèse historique*, vol. xxv (1912) 129-42, 267-85, and vol. xxvi (1913) 64-81.

LAW

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PRIMITIVE. Many historical jurists in contrast with the analytical school have used the term law to include most if not all processes of social control. The term is, however, usually confined to "social control through the systematic application of the force of politically organized society" (Pound). The limited application, more convenient for purposes of sociological analysis and classification, will be adopted in this article; the field of law will therefore be regarded as coterminous with that of organized legal sanctions (see SANCTION). The obligations imposed on individuals in societies where there are no legal sanctions will be regarded as matters of custom and convention but not of law; in this sense some simple societies have no law, although all have customs which are supported by sanctions.

The confusion which has resulted in the attempt to apply to preliterate societies the modern distinction between criminal law and civil law can be avoided by making instead the distinction between the law of public delicts and the law of private delicts. In any society a deed is a public delict if its occurrence normally leads to an organized and regular procedure by the whole community or by the constituted representatives of social authority which results in the fixing of responsibility upon some person within the community and the infliction by the community or by its representatives of some hurt or punishment upon the responsible person. This procedure, which may be called the penal sanction, is in its basic form a reaction by the community against an action of one of its own mem-

bers which offends some strong and definite moral sentiment and thus produces a condition of social dysphoria. The immediate function of the reaction is to give expression to a collective feeling of moral indignation and so to restore the social euphoria. Its ultimate function is to maintain the moral sentiment in question at the requisite degree of strength in the individuals who constitute the community.

Comparatively little precise information is available concerning penal sanctions in preliterate societies. Among the actions which are known to be treated as public delicts in the simpler societies are incest—marriage or sexual congress with persons with whom such relations are forbidden; sorcery, or evil magic, by one person against another within the community; repeated breaches of tribal custom; and various forms of sacrilege. In many preliterate societies the penal sanction is applied principally if not solely to actions which infringe upon customs regarded by the community as sacred, so that the sanction itself may almost be regarded as a special form of ritual sanction. Ritual sanctions are derived from the belief that certain actions or events render an individual or a group ritually unclean, or polluted, so that some specific action is required to remove the pollution. In many examples of penal sanction it may plausibly be held that a deed such as incest produces a pollution of the whole community within which it occurs and that the punishment, which may mean the killing of the guilty persons, is a means of cleansing the community. Upon the establishment of a political or executive authority even of the

simplest kind disobedience of that authority's commands may be subject to penal sanctions and treated as a public delict; moreover direct offenses against the constituted authority or against the persons in whom that authority rests may be subject to penal sanctions. Thus when the social authority rests in chiefs, an offense which would be a private delict if committed against a commoner may be treated as a public delict when committed against a chief.

In the procedure of a law of private delicts a person or a body of persons that has suffered some injury, loss or damage by infringement of recognized rights appeals to a constituted judicial authority, who declares some other person or body of persons within the community to be responsible and rules that the defendant shall give satisfaction to the plaintiff, such satisfaction frequently taking the form of the payment of an indemnity or damages. A private delict is thus an action which is subject to what may be called a restitutive sanction. The law of private delicts in preliterate societies corresponds to the civil law of modern times. There are, however, certain important differences. In general in modern law actions which fall simply under civil law are those which cause damage but are not subject to reprobation. Consequently although the civil sanction expressed through the payment of damages causes loss to the defendant, it is not specifically punitive. Even in modern civil law, however, a magistrate may in special instances award "punitive damages" thereby expressing the view that the injury committed is of such a kind as to be properly subject to reprobation and therefore to punishment. In modern law when a deed is an offense against morality and at the same time inflicts injury it may become actionable under both criminal and civil law. The emphasis in the punishment for homicide or theft is on its aspect as an offense against the community rather than on the principle that restitution should be made to those who have suffered by the deed.

In preliterate societies private delicts are for the most part killing, wounding, theft, adultery and failure to pay debts; and while they are primarily regarded as constituting an injury to some member of the community they are subject also to moral reprobation as antisocial actions. The sanction is frequently both restitutive and repressive, giving satisfaction to the injured person and inflicting punishment upon the person responsible for the injury; for example, in some African tribes a thief is required to restore to

the person whom he has robbed double the value of what he has taken. In its basic form the law of private delicts is a procedure for avoiding or relieving the social dysphoria which results from conflicts within a community. An offense committed against another member or group of the same community by inflicting a sense of injury upon the victim creates a disturbance of the social life which ceases only when satisfaction is rendered to the injured person or persons. Thus in African native law a judge is not regarded as having properly settled a case until all parties concerned are satisfied with the settlement.

The distinction between public delicts and private delicts illustrates the fact that the law has no single origin. A deed committed by a member of the community which offends the moral sense of the community may be subject to three sanctions: the general or diffuse moral sanction, which makes the guilty person subject to the reprobation of his fellows; the ritual sanction, which produces in the guilty person a condition of ritual uncleanness that constitutes a danger to himself and to those with whom he is in contact—in such cases custom may require him to undergo ritual purification or expiation or it may be believed that as a result of his sin he will fall ill and die; the penal sanction, whereby the community through certain persons acting as its constituted judicial authorities inflicts punishment on the guilty person, which may be regarded either as a collective expression of the moral indignation aroused by the deed or as a means of removing the ritual pollution resulting from the deed by imposing an expiation upon the guilty person or as both.

On the other hand, an action which constitutes an infringement of the rights of a person or group of persons may lead to retaliation on the part of the injured against the person or group responsible for the injury. When such acts of retaliation are recognized by custom as justifiable and are subject to a customary regulation of procedure, various forms of retaliatory sanctions may be said to prevail. In preliterate society generally warfare has such a sanction; the waging of war is in some communities, as among the Australian hordes, normally an act of retaliation carried out by one group against another that is held responsible for an injury suffered, and the procedure is regulated by a recognized body of customs which is equivalent to the international law of modern nations. The institution of organized and regulated vengeance

is another example of a retaliatory sanction. The killing of a man, whether intentional or accidental, constitutes an injury to his clan, local community or kindred, for which satisfaction is required. The injured group is regarded as justified in seeking vengeance and there is frequently an obligation on the members of the group to avenge the death. The retaliatory action is regulated by custom; the *lex talionis* requires that the damage inflicted shall be equivalent to the damage suffered and the principle of collective solidarity permits the avengers to kill a person other than the actual murderer, for example, his brother or in some instances any member of his clan. When the institution is completely organized, custom requires the group responsible for the first death to accept the killing of one of their number as an act of justice and to make no further retaliation. Retaliatory sanctions may also appear in relation to injuries of one person by another; for example, the recognized right in certain circumstances of one person to challenge another to fight a duel. Among Australian tribes an individual who has suffered injury from another may by agreement of the elders be given the right to obtain satisfaction by throwing spears or boomerangs at him or by spearing him in a non-vital part of the body, such as the thigh. In all instances of retaliatory sanction there is a customary procedure for satisfying the injured person or group whereby resentment may be expressed, frequently by inflicting hurt upon the person or group responsible for the injury. Where it works effectively the result is to provide an expiation for the offense and to remove the feeling of injury or resentment in the injured person or persons. In many societies retaliation is replaced more or less by a system of indemnities; persons or groups having injured other persons or groups provide satisfaction to the latter by handing over certain valuables. The procedure of providing satisfaction by indemnity is widespread in preliterate societies which have not yet developed a legal system in the narrow sense.

Among the Yurok, who are food gatherers and hunters living in northern California in small villages with no political organization, there is no regular procedure for dealing with offenses against the community and therefore no law of public delicts. Injuries and offenses of one person against another are subject to indemnities regulated by custom; every invasion of privilege or property must be exactly compensated; for the killing of an individual an indemnity or

blood money must be paid to the near kin. After a feud or war each side must pay for those who have been killed on the other side. Only the fact and amount of damage are considered; never the question of intent, malice, negligence or accident. Once an indemnity for an injury has been accepted it is improper for the injured person to harbor any further resentment. As the payment of indemnities is arranged by negotiation between the persons concerned and not by appeal to any judicial authority, the law of private delicts in the strict sense is not present. Among the Ifugao, who cultivate rice on terraced hill-sides of northern Luzon in the Philippines and who have no political organization and no system of clans, "society does not punish injuries to itself except as the censure of public opinion is a punishment"; that is, there is no law of public delicts, no actual penal sanction. Nevertheless, a person who practises sorcery against one of his own kin is put to death by his kin; on the other hand, incest between brother and sister, parricide and fratricide are said to go unpunished. It is probable, however, that there are powerful and effective ritual sanctions against these acts. An offense committed by one person against another person or an infringement of the rights of one person by another is the occasion of a conflict between the kindred of the two parties, including relatives through both father and mother to the third or fourth degree. Retaliation by the killing of the offender or sometimes of one of his kin is the regular method of obtaining satisfaction in cases of murder, sorcery, adultery discovered *in flagrante*, refusal to pay an indemnity assessed for injury suffered and persistent and wilful refusal to pay a debt when there is ability to pay. Satisfaction is provided in other cases by the payment of indemnities. There are no judicial authorities before whom disputes may be brought; the negotiations are carried out by a go-between who belongs to neither of the two opposed groups of kindred. Certain persons obtain renown for themselves as successful go-betweens, but such persons have no authority and are not in any sense representatives of the community as a whole. During the controversy the two parties are in a condition of ritual enmity or opposition and when a settlement is reached they join in a peacemaking ceremony. A scale of settlement is recognized by custom and in certain circumstances the payments vary according to the class—wealthy, middle class or poor—to which the group receiving or making payment belongs.

The Ifugao thus have an organized system of justice, which, however, does not constitute a system of law in the narrow sense of the term since there is no judicial authority.

An important step is taken toward the formation of a legal system where there are recognized arbitrators or judges who hear evidence, decide upon responsibility and assess damages; only the existence of some authority with power to enforce the judgments delivered by the judges is then lacking. It has been argued plausibly that in some societies a legal system for dealing with private delicts has grown up in this manner: disputes are brought before arbitrators who declare the custom and apply it to the case before them; such courts of arbitration become established as regular tribunals; and finally there is developed in the society some procedure for enforcing judgments.

A development similar to this is illustrated by the practises of the A-Kamba, A-Kikuyu and A-Theraka, Bantu peoples to the south and southeast of Mount Kenya in east Africa who live in scattered household communities, keep cattle, sheep and goats and grow grain in hand tilled fields. They have no chiefs and are divided into well defined age grades, one of which consists of elders who exercise both priestly and judicial functions. If there is a dispute in which one person believes his rights have been infringed by another, the disputants call together a number of elders of the district or districts in which they live and these constitute a court to hear the case. The court acts primarily as a court of arbitration and as a means of deciding upon the customary principles of justice by which the dispute should be settled; it usually takes no steps to enforce the judgment on the losing party but leaves this task to the claimant. In serious cases, however, when an offense affects the whole community or when the accused is regarded as a habitual and dangerous offender so that public indignation makes the affair one of public concern, the elders can exercise authority to enforce judgment. The usual procedure rests on the ritual powers of the elders; they can pronounce a curse—which is feared as inevitably bringing down supernatural punishment—on a person who refuses to obey a judgment. The killing of a member of one clan by a member of another, whether intentional or accidental, is treated by the court of elders as a private delict and is settled by the payment of an indemnity to the relatives of the victim by the killer and his relatives. The elders also pos-

sess limited powers of dealing with public delicts by a procedure known as *kingolle*, or *mwinge*. If a person is held guilty of witchcraft or is regarded as a habitual offender and thus as a public danger, the elders may inflict the punishment of death or may destroy the offender's homestead and expel him from the district. Before such action may be taken elders from remote regions must be called in for consultation and the consent of near relatives of the offender must be obtained.

The Ashanti afford a contrast to the system of the A-Kamba in that they have a well organized law of public delicts, which are designated by a native term which means "things hateful to the tribe." These include murder, suicide, certain sexual offenses including incestuous relations with certain relatives by descent and by marriage, certain forms of abuse, assault and stealing, the invocation of a curse upon a chief, treason, cowardice, witchcraft, the violation of recognized tribal tabus and the breaking of a command of the central authority issued and qualified with an oath. The Ashanti conception of the law is that all such actions are offenses against the sacred or supernatural powers on which the well being of the whole community depends and that unless these offenses are expiated by the punishment of the guilty persons the whole tribe will suffer. The judicial functions belong to the king or chief (the occupant of a sacred stool), before whom the offender is tried. The punishment for the more serious offenses is decapitation, although in certain circumstances the condemned man and his relatives may "buy his head"; that is, pay a redemption price by which his life may be saved. The courts of the chiefs do not concern themselves with private delicts, which are denoted "household cases" and settled by the authority of heads of kinship groups or by negotiation. A dispute concerning a private delict may be brought before the chief indirectly if one of the parties involved swears an oath, which thus makes the dispute a public matter.

While the A-Kamba elders are concerned mainly with private delicts and the Ashanti chiefs with public delicts, there are tribes and nations in Africa and elsewhere in which the central authorities—the chiefs or the king and his representatives—administer both kinds of law, which may always be differentiated by reference to procedure. In the law of private delicts a dispute between persons or groups of persons is brought before the judicial tribunal for settle-

ment; in the law of public delicts the central authority itself and on its own initiative takes action against an offender. Modern criminal law and civil law are directly derived respectively from the law of public delicts and the law of private delicts; but acts which are now regarded as characteristically public delicts, such as murder and theft, are in many preliterate societies treated as private delicts, while the acts which in such societies are most frequently regarded as public delicts are witchcraft, incest and sacrilege.

In its most elementary developments law is intimately bound up with magic and religion; legal sanctions are closely related to ritual sanctions. A full understanding of the beginnings of law in simpler societies can therefore be reached only by a comparative study of whole systems of social sanctions.

A. R. RADCLIFFE-BROWN

GENERAL VIEW OF ANCIENT. The knowledge of the legal life of antiquity possessed by the contemporary world and its relation to that life rest primarily on Roman law. This is true not only of Latin, Germanic and Slavic Europe, whose legal systems are linked with Roman law either through an uninterrupted development or through a later reception, but also of the Anglo-American world, which despite the lack of a reception has maintained a certain spiritual relation with Roman law—a relation that has tended recently to become even closer. The forces that brought about the reception are still operative, although under different forms, in the countries to which the Roman law came. The political factor, which made the unlimited power of the Roman-Byzantine absolute monarchs serve as a worthy exemplar for mediaeval and later western emperors and for the Russian rulers until the downfall of czarism; the religious factor, which found in antiquity a model for the legal system of the Catholic church and even for the Caesaro-papism of the Greek Orthodox churches; the scientific factor, which linked with the first two and finding for a time in Roman law as it was taught in the Italian, French and German universities the ideal juristic system, the *ratio scripta*, brought about a concentration on the study of that law; finally, the economic factor, which made the rising cities and business interests of the later Middle Ages and the Renaissance see in Roman law as the embodiment of the practise of an ancient world empire a useful instrument for their own purposes, all these forces acting together were effective in

linking continental Europe to Roman law as to no other system.

This process cannot be explained by the fact that the systematic character of Roman law was particularly attractive to conceptual jurists sensitive to theory nor was it due to a valuable historical, philological or philosophical tradition. To be sure, all emperors (and they were copied by the princelings) loved the glamour which Roman public law had known how to impart to the imperial power; also before the church had created its own canon law it may have wished to emphasize, by placing high value on the *Corpus juris*, the influence exerted by Christianity on the Byzantine law of the Christian imperial period. Again, many a phase in the development of the universities may have been influenced by the real or supposed ancient beauty of the Roman legal system and may have seen in it the *ars boni et aequi*. But the cities, the commercial groups and especially the law practitioner, who had his eye on the practical decision of cases, were interested less in the correctness of the system and the beauty of the whole than in finding a working solution for particular problems. And this solution was offered by the numerous *responsa* of the *Digesta* and the *rescripta* of the *Codex*. This element of appeal must be attributed to the practical intelligence, sober-mindedness and objectivity displayed by the Roman jurists in balancing interests against interests in their private law.

This fact is essential for an understanding of the dominance of the Roman law in legal and political life since the Middle Ages. What secured its prominence was not so much its scientific character as its utility. There were of course many whose interest in it was scientific; there were always individual scholars who cherished it in the humanistic spirit as a product of antiquity; there were whole movements that set themselves to differentiate evolutionary strata in this law and to separate classic sources from Justinianian interpolations. The historical jurisprudence of Savigny especially directed attention back to the pure Roman law. But despite the influence of this school jurists have remained interested rather in the contemporary significance of Roman law. This was inevitable as long as the *Corpus juris* was effective law in a large part of Germany. In university teaching and in legal practise the Pandects were decisive, and research was largely of a dogmatic sort. Essentially of course the system was no longer Roman but had been modernized; the casuistry, however, re-

mained Roman and survived in the correctness and usefulness of the individual decisions. The Romans had converted their *jus civile*, at first intended only as the law of a city-state, into a *jus gentium*, or system of world law, and this had maintained its sway over the world for centuries after the collapse of their political world imperium. So strong was the supremacy of the Roman law even in jurisprudence that all other legal traditions of antiquity were thrust into the background. Thus the law of classical Greece, the only other ancient culture that had been generally considered by historians, was ignored. Cicero's dictum concerning the insignificance and even ridiculousness of all non-Roman jurisprudence (*De oratore* I: 44, 197) retained for centuries the validity of a program. And this attitude toward non-Roman law was shared not only by practising lawyers but also by most legal theorists in their teaching and research up into the nineteenth century. Only German legal history under the influence of the historical school managed to free itself from the confines of Roman law.

Not all aspects of Roman law, however, have retained their relevance to the present. Public, criminal and procedural law, following separate roads, have all been strongly nationalized. Private law alone has remained Roman; the other domains of Roman law, no less important historically, were termed antiquities and given over to historians and philologists. Without underestimating the painstaking work done by philologists in a field neglected by jurists it must be admitted that only the scholar trained in the legal discipline can capture completely or even glimpse the spirit of the legal sources. Mommsen managed to perform this feat for Roman public law, and along with others he directed juristic interest back to Roman criminal law. Other scholars added to the study of private and public law that of legal procedure, where it was particularly true that every investigation had to proceed along strictly legal-historical lines. And this method passed over to studies in private law. To the dogmatic approach of the lawyer was added the historical approach, inquiring whether the opinion of a given jurist was actually as cited by Justinian or whether it had been changed and interpolated. Although studies in interpolations were pursued by Cujas and Faber as early as the sixteenth century, this sort of research received a new impetus in the nineteenth and grew to a discipline in which radical and conservative tendencies clashed. The

new line of inquiry sought to lay bare not only the genuineness of a given passage but also, if there was an interpolation, its authorship and the circumstances under which it had been introduced. For a long time no one doubted that the interpolations were made by Justinian's codifying commissions with the emperor's consent. But then the question arose whether interpolated texts had not even before the time of codification become the basis for teaching in the law schools, especially at Beirut. Although the law teachers would probably not have attempted a direct change in the accepted legal sources without authorization, it is possible that criticism may have been applied to existing law in the course of its formulation. This may have been resorted to either because the laws had become antiquated or ill adapted to the conditions of the Eastern Empire or because of a conflict between the ideas of the constitution of the Western Empire and the Hellenistic customs of the east—the antithesis between imperial law and national, or native, law. Recalling Cicero's arrogant dictum, one can understand in turn how intensely jurists of Greek descent, conscious of the superiority of the Hellenistic to the Roman culture, must have opposed the western imperial law. But one can also appreciate the determination of Justinian to introduce unity and order into the codification and to suppress every outcropping of a *doctrina adulterina*.

Mitteis' pioneer work, *Reichsrecht und Volksrecht in den östlichen Provinzen des römischen Kaiserreichs* (Leipzig 1891), brought the concept of the Roman *Volksrecht* into current use. Whatever this *Volksrecht* was, it was clearly not Roman law. There was revealed suddenly the variegated, mosaiclike entity that actually functioned as law in the wide expanse of the Roman Empire under the official legal system as expressed in the *Corpus juris*. The Roman world empire included all the states of antiquity and consequently their diverse cultures and legal systems. The question of the interrelation of the various legal cultures of antiquity is far from clear; in fact the issue constitutes the chief problem of ancient legal history.

Foremost among the legal systems of antiquity that demand study are the Greek and Hellenistic, and next to them those of the near eastern cultures, such as the Babylonian, Assyrian and Hittite. Investigations already made in these fields have revealed much of the political, legal, economic and religious life of remote millennia but have thus far failed to establish an

immediate connection between these civilizations and our own culture. Roman law, because of the traditional force of its private law, seems to occupy a unique place in this respect. Only Jewish law, whose theocratic origins give it a place quite apart from all other laws, is still a living law for a widely scattered people. A comparison between the casuistry of the later Jewish law—still little investigated—as revealed in the Talmud and rabbinical literature and that of Roman law would reveal methodological similarities. But on the whole Jewish law has been confined to the Jewish people, a fact which has at once enabled it to preserve its peculiar character and prevented it from becoming a world force.

With respect to Greek law it is now widely held that beyond the formally autonomous legal systems, applying only to the individual city-states, there was a common fund of Greek legal ideas. This can be said without losing sight of the particularistic forces that were at work. There was no *Corpus juris* in which the law was codified. The scattered mass of fragmentary traditions by which students of Greek law are confronted, the necessity of consulting a large non-juristic literature as well as a multitude of inscriptions, and the linguistic difficulty of deciphering the dialects of inscriptions dating from different periods—one need only mention the Laws of Gortyn—attest some of the difficulties that would have been encountered by codification. Nevertheless, the diffusion of Greek law was as wide as that of Greek culture. Rome could not escape its impact: from the time of the Twelve Tables through the republic and principate to the period of absolutism, when the center of the empire was shifted to Byzantium, the influence first of Hellenic and then of Hellenistic law can be traced. In fact it would be a step toward the solution of the problem of interpolation mentioned above in connection with Beirut if it could be established to what extent old Greek statutes were still preserved under the late empire only to be introduced into Roman law. Another pressing problem of research is the investigation as to what elements in Greek law are to be considered an inheritance from pre-Hellenic civilizations in Greece. There is the further problem of whether the relation between Greek and Roman law was as close as was formerly assumed in the attempted construction of a Greco-Italic legal history or whether, as is now believed, it was more remote. And, finally, there looms the vast problem—hitherto rather

anxiously avoided—of searching out the Indo-Germanic connections, a problem requiring research in Germanic, Celtic, Iranian and Indian legal studies. There is no lack of detailed monographic attempts to establish the connections.

The center of interest in studies of native law has recently been assumed by Hellenistic law, particularly in Egypt, where numerous Greek papyri have been discovered extending from the period immediately following the reign of Alexander far into that of Arabian power. These will, it is hoped, serve to clarify the problem of the relative importance of oriental and Greek elements which is present in all the phases of Hellenistic culture. The study of these questions requires a knowledge of Egyptian national law, a knowledge which is being applied with good results also in studies in legal history. The Coptic papyri belonging to the later Roman period point to a revival of this national law. In the Arabic period, however, there is a continuance of Roman-Byzantine legal influences, indicating a connection with Islamic law. These documents, which have been preserved for centuries in the hot sands of the desert and which deal with the daily life of Egyptian peasants, Hellenic and Roman officials and the peculiar hybrid Greco-Egyptian population mixture, constitute a history of a thousand years and, if the papyri in the Egyptian demotic and those in Arabic are taken into consideration, of a few additional centuries. It is clear that these papyri possess an immense importance for the knowledge of Egyptian legal life. In reading them one sees how little the life of the ordinary citizen was affected by the fact that his ruler might be a pharaoh or a Ptolemaean or a Roman emperor residing either in Rome or Byzantium. The opportunity offered by these papyri of tracing the effect of Hellenistic, Roman-Byzantine and Arabian foreign rule on so completely closed a country as Egypt makes them of extraordinary importance for our whole evaluation of Hellenistic-Roman antiquity.

Studies of the cuneiform documents, which afford a concrete picture of the legal life of the Babylonians, Assyrians and Hittites, opened for jurists a new chapter in ancient law. For Mesopotamia there exist legal sources going back to the Sumerian period and making it possible to distinguish not only between Babylonian and Assyrian rule but also between different periods within each extending from the end of the third millennium up to the age of the Seleucids, Arsacids and Parthians. The great laws and legal

books—the famous Code of Hammurabi (c. 2100 B.C.), the middle Assyrian law book of the fifteenth or fourteenth century B.C., a Hittite law book of the fourteenth century B.C.—as well as a multitude of lesser documents on clay tablets serve as an introduction to the living law of these civilizations. This legal culture is characterized by a strong conservatism and great vigor. Excavations made recently in Dura-Europos, on the eastern rim of Hellenic culture, reveal connections between Greek and oriental legal systems and display certain similarities to the contents of the Roman-Syrian law book of a much later period (fifth century A.D.). Just how strong an influence the Orient exerted on Greek and Roman legal culture is a continually recurring question. In the domain of public law the Roman Empire presented a peculiar type of political organization, unparalleled in Greek and certainly in Germanic civilization. In it the monarchical element was so clearly delimited and was characterized by such solidity and durability that only the oriental monarchy, Hellenized by Alexander, may be considered comparable. It is in this element that despite occasional deflections the characteristic trend of Roman law lies. And just as the Etruscan tinge in the Roman *imperium* shows that Roman statecraft in its beginnings already points to the East, which was probably the original home of the Etruscans, so the new pure form assumed by the *imperium* under Caesar unmistakably has its roots in the oriental-Hellenistic idea of the divine king. By a policy of wise foresight and consideration for the republican sentiments of the West, Augustus slowly but securely paved the way for a similar system.

Thus in the field of public law the program of incorporating the comparative history of ancient legal systems into a unified history of the public law of antiquity may be regarded today as already justified. Whether or perhaps more correctly how far eastern and universal influences may also be traced in Roman private law during the period of the absolute empire, or whether the Roman West here asserted itself more strongly—all these are questions for the future. And whatever the answer to these questions, they constitute the general problem of ancient legal history. It is obvious that no unified legal system was operative in all the Mediterranean countries. That even the *Corpus juris* did not embody such a unity has been sufficiently proved by studies in the field of native law. It is nevertheless true that the *Imperium roma-*

num represented clearly a political and, at least formally, a legal unity, whose formative factors the legal historian must establish.

LEOPOLD WENGER

EGYPTIAN. The number of legal documents and fragments of laws surviving from pre-Ptolemaic Egypt is so small as to make it impossible either to give an account of the evolution of Egyptian law or to survey systematically the various branches of its jurisprudence. Nevertheless, it is clear that there existed in Egypt from the time of the Old Kingdom (c. 3400–2475 B.C.) a highly developed legal culture which was entirely worthy of the esteem in which it was held by Greek philosophers and orators and which was in no way inferior to the contemporary development of the law of the near eastern peoples.

The history of the law of Egypt must today be confined to determining to what extent the great lines of development of general Egyptian cultural history can be traced in Egyptian legal history. Of the first great brilliant period of Egypt, the Old Kingdom, about a dozen legal documents are known. They not only point to a very finely developed law, which must have been recorded already in written form—an inscription of the eighteenth dynasty speaks of the ancient custom (or duty) of the vizier when he sat in judgment to keep the forty rolls of the law open before him—but also indicate that in this period certain typical features of Egyptian law were already given consistent application. There exist from this period contracts of sale, deeds of gift, wills and judgments, which in form and content correspond in many respects to the known characteristics of such documents in later periods. Written forms of pleading seem already to have existed in this remote age. From the available material it may be surmised that the period of the Old Kingdom, in which were developed the basic forms of Egyptian art, was also the period of the origin of Egyptian law.

There are also extant several legal documents from the second brilliant period of Egypt, the Middle Kingdom (c. 2160–1788 B.C.), which indicate that the cultural level of the Old Kingdom was once more attained in this era. Nevertheless, the material is insufficient definitely to establish that progress took place. According to questionable assertions of the Greek historian Diodorus one of the kings, Sesostris (Sesoosis), was an important lawgiver of this period.

It is probable that the great pharaohs of the

New Kingdom (1580-712 B.C.), who applied such original and creative ideas to the organization of religion, warfare and administration, were also active in the field of law. But only from the reign of King Harmhab (1350-1315 B.C.), a period in which the political and cultural decline of the New Kingdom had already begun, does there exist a major piece of legislation, relating to extortions by officials. From the period of the dynasty founded by Harmhab and the following dynasty there is extant a greater number of juristic texts. Ever since the death of the great reformer King Ikhnaton (1375-1358 B.C.) the power of the priesthood had been on the increase to the detriment of the secular executive power. To this condition may possibly be attributed the fact that from this period in addition to judgments reached by juristic methods there exist numerous decisions of suits on the basis of a divine oracle. It is not known to what extent the priests were able arbitrarily to influence these oracular decisions; in any case such decisions must have given rise to great legal insecurity. The custom, traceable from about the same period, of avoiding the decision of the oracle by means of well stipulated covenants, which also settle in advance the course of proceedings in any future suit and which from the first are made matters of judicial record, may have been a means of countering this legal insecurity. Oracular decisions may be traced to the last period. But even in the popular courts of secular origin from this time until the Ptolemaic era the priests often took a prominent part. The development of elaborate forms of contract is attributed by Diodorus to the activity of King Bocchoris (718-712 B.C.), with whose reign many historians conclude the New Kingdom.

From the following period, that of the Ethiopian kings, many contracts have been preserved which appear to continue this development. From now on richer material is available, especially in the demotic characters which came into use about 660 B.C. According to these documents of the last period (712-332 B.C.) Egypt again possessed a well developed jurisprudence, which was so powerful that it was not only able to sustain its individuality during periods of foreign domination, especially during the Persian conquest (525-332 B.C.), but was able also to influence strongly the law of immigrating foreigners, as, for example, the Jewish military colonists in Syene. Under the Ptolemies (332-30 B.C.) also Egyptian national law was able to maintain itself on the land (*chora*, thus enchoric

law): the demotic documents of the Ptolemaic and early Roman period contain more Egyptian than Greek or newly created law, and even Greek papyri show some Egyptian influence. Even for the Roman period there are traces of Egyptian law, which at that time, however, was definitely declining. In the Byzantine and Arabic periods, however, it was revived in many minor features in the Coptic legal documents.

Several typical characteristics which can be deduced from existing material may be pointed out here. The marked religious tendency of the Egyptians influenced the law, as it did all other fields of culture. The religious conceptions of the Egyptians caused them to place great value on beautiful tombs and on certain sacrifices to the dead. The legal system therefore made the burial of the testator a condition to succession. Only because he had buried the testator might the successor take possession of his fortune. The Egyptian also insured by contract the performance of sacrifices after his death. If for this purpose he made over part of his alienable estate to a priest, the law allowed him to attach to the grant of the property a condition of forfeiture valid in perpetuity. Thus as soon as the priest or his successor in office ceased to offer up the stipulated sacrifices he was to be deprived by the public authorities of the property of the deceased, which should then be given to another. Whether there can be seen in such and similar trusts of property beginnings of the incorporated foundation is, however, still doubtful. Wills appear in the oldest legal documents. If a person dies intestate, the children succeed but in such a way that the oldest son takes precedence. Intestate succession does not, however, appear to have been regulated in the same manner at all periods.

Slavery was known in Egypt but assumed no very harsh form; in any event Egyptian slaves in the last period, to somewhat the same extent as Greek slaves, were held to possess legal personality. Women as well as men appear to have been qualified for business and litigation. Marital property contracts, according to which the property of the wife consists of her dowry and a settlement from the property of the husband, can be traced back into the New Kingdom. The closing of such a contract for the security of the married woman and the children was customary although probably not indispensable to the legal validity of the marriage. Polygamy was rather rare, and after the end of the New Kingdom it probably disappeared. Divorce by the husband

as well as by the wife appears to have presented no difficulties.

There is evidence of private property from the period of the Old Kingdom. The Egyptians possessed an institution closely resembling the land register. There were exact lists of taxpayers, which recorded every plot of land and its owner. In lawsuits this register could be produced as evidence of ownership. At the end of the New Kingdom, when the number of documents increased markedly, there were judicial and temple archives for the preservation of contracts of all kinds. Another method of publishing and thus securing contracts was the placing of a stone inscription in a public place.

The Egyptian legal documents of the last period are usually declarative; the party who has first performed speaks of the legal transfer of the subject of the performance and the obligations assumed by the other party in consequence. A document is employed also in the case of completed cash transactions, when it is usually executed by the party who has transferred the specific property.

Little is known of Egyptian criminal law. The existence of the *lex talionis* is no longer definitely provable. Punishments were very severe but offenders were sometimes allowed to commit suicide. Unfortunately the two greatest records of such criminal trials as are available relate to such exceptional cases—as a trial of a royal harem conspiracy or of tomb robbers—that it would be unsafe to generalize from them as to the normal procedure. More reliable are the ostraca and papyri in hieratic characters which contain the proceedings of criminal trials during the New Kingdom. The sentence is here often pronounced on the basis of a divine oracle.

ERWIN SEIDL

CUNEIFORM. By cuneiform law is meant all laws which make use of the cuneiform script for their written inscription. According to the present status of excavation their geographical scope includes not only the original lands of Babylonian civilization—Babylonia and Assyria—but extends in the east as far as the mountainous Elam region, reaching northward to the Zagros Mountains, while it extends toward the west through Mesopotamia and Asia Minor to Syria and the coast of the Mediterranean. Chronologically cuneiform law begins at least as early as 3000 B.C. with the first interpretable legal inscriptions and continues down to the gradual disappearance of Babylonian civilization

during the second and first centuries B.C. It is obvious that there could not have been a uniform legal system covering this vast geographical area and enduring throughout this long period. What we have to deal with is rather a complex of laws of the peoples who settled in the mother countries as well as of those who, located in the surrounding regions, came under the influence of Babylonian civilization. The cuneiform script, however, which was peculiar to Babylonian civilization, may serve as the external criterion of this cultural influence as well as of a certain historical unity; in this connection the Chinese script offers an analogy.

Up to the present time there have been made eleven subdivisions, geographical as well as chronological, in cuneiform law: Sumerian, Old Akkadian, Old Babylonian, Elamitic, Old Assyrian, Middle Babylonian, Middle Assyrian, Hittite, Subaraean, neo-Assyrian and neo-Babylonian. Sumerian law dates from the oldest legal inscriptions to the fall of the last dynasty of Ur about 2200 B.C. The Sumerians were the earliest inhabitants of Babylonia to leave legal inscriptions; they invented cuneiform writing and founded Babylonian culture. Knowledge of Old Akkadian law is limited chiefly to the dynasty of Akkad, about 2700 to 2600 B.C. The Akkadians differed from the Sumerians, whose agglutinative language has made linguistic classification thus far impossible, in that they were Semites who had inhabited northern Babylonia from the earliest known times. Old Babylonian law flourished from 2200 to 1800 B.C. With the downfall of Sumerian rule social changes, resulting probably from the immigration of Semitic tribes from west and north, led to the rise of Semitic dynasties as well as to the absorption of the Sumerians in the Semitic population. The power of Babylonia under the first Babylonian dynasty intensified its cultural influence upon Elam, where legal documents were drawn up in the Akkadian language at about this time. Old Assyrian law developed during the last centuries of the third millennium. While there is no evidence of this law for Assyria itself, there are documents from Assyrian trading colonies in Asia Minor. These colonies were located near Kaisarieh in what was later called Cappadocia, and the documents are therefore called Cappadocian. These extremely difficult texts—legal documents and letters—indicate the existence of a highly developed commerce with Assur. To the present time they have constituted also the chief proofs of the existence of a specific

commercial law in the area of the Near East. This problem, however, requires further research.

The fall of the first Babylonian dynasty, caused by a migration which brought the barbarous mountain people of Kaššu (Cassites) into Babylonia, represented a collapse of civilization. For centuries thereafter sources are lacking; and in the period from 1500 to 1200 B.C., for which sources are once more available, they indicate the emergence of a new world, a renaissance of Babylonian civilization, which for the first time spread visibly through the entire Near East, taking on an international character. In a political system of several rival powers, cuneiform writing became the prevailing script, used even for the recording of foreign idioms, while the Akkadian language became the language of international and diplomatic communication. Hence it is not by chance that there are extant legal records covering the territories of all the powers in existence at the time. There are distinctions between Middle Babylonian law, which shows the Cassites to have been already wholly assimilated by Babylonian culture; Middle Assyrian law, preserved chiefly through documents from Assur; Hittite law, in so far as it can be reconstructed from the documents in the state archives of the capital Hattušaš (Boghaz Keui) in Asia Minor, which were written in the Akkadian and Hittite languages; and Subaraean (Hurrite) law in the documents from Arrapha (Nuzi-Kirkuk) east of Assur written in Akkadian. Although Arrapha was only a small vassal kingdom of the Mitanni Empire, the fourth great power in the Near East, its documents are representative of the law of the latter; for the peoples were of the same race, neither Indo-European nor Semitic.

The great migration which began about 1200 B.C. represents another dark period in the history of Babylonian law. Again there was a change in the population, this time characterized by the penetration of Aramaic tribes, who gradually adapted their primitive forms of life to the Babylonian civilization, which had maintained itself with difficulty in the cities. Toward the close of this period there emerged the neo-Assyrian law (800-700 B.C.), evidenced particularly by finds in Nineveh; Assyria was at that time a world power but toward the end of the seventh century it disintegrated thus disappearing from the history of the world. The following neo-Babylonian period (c. 700 B.C. to c. 200-100 B.C.) may be considered homogeneous although it includes

the domination of the Persians (after 539 B.C.) and that of the Greeks (after 331 B.C.), subsequent to the rule of the native Chaldaean dynasty. As far as it has been possible to observe, foreign rule involved no profound changes in the law. It is true that the vast mass of material covers only a portion of Babylonia, although the clay tablets found in Nerab (near Aleppo) indicate a wider dispersion of neo-Babylonian law. The major competitors of cuneiform writing and of the clay tablet were the Aramaic alphabet and the parchment or papyrus document, which was much better adapted to the latter script. Developing as early as the neo-Assyrian period, it must have spread increasingly among the Aramaic population from the time of the Persians, whose official language was Aramaic, so that during the period of the Seleucids the cuneiform document was used solely in the conservative temple administrations. Together with cuneiform law it disappeared here as well about the end of the second century B.C.

Whether these laws, the number of which may be increased in time through new excavations, are related otherwise than by their common cuneiform script is largely a moot question today. It may be said that the phrases of the Sumerian documents influenced most profoundly those of the Old Akkadian and Old Babylonian texts and that their influence continued to the Cassite period. This influence, however, scarcely extended so far as Elam and Assyria; and the neo-Babylonian documents represent a type concerning whose origin nothing at all is known. The problem of the material interaction of these laws is a much more difficult matter, especially in the field of civil law. With respect to civil law, which is based upon the elementary instincts of man and is conservative in its evolution, comparative law indicates that corresponding development, even in the laws of peoples who came into historical contact with one another, is due to an independent parallel evolution rather than to diffusion, even if diffusion could be evidenced in business forms. Therefore it is for the present hypothetical whether cuneiform law exerted any influence upon the West, particularly upon Greek law, with which it came into contact during the last stage of its evolution.

A history of the evolution of cuneiform law is impossible today, and it is unlikely that it can ever be written. The various known periods are separated by intervals which are poor in sources or for historical reasons possess none at all,

because periods of migration and of cultural decay leave little or no written records. During these periods Babylonian civilization was not destroyed, it is true; it was merely buried. It is to be assumed, however, that the new population had to travel the road from primitive legal conditions to higher forms of law, which made written records necessary. Yet as far as it is possible to compare the various periods with one another there is no continuously ascending line of development. The oldest records do not disclose the primeval status of law, nor do the later periods necessarily evidence a more developed law. Thus the Semitic law of the Old Babylonian period is in many respects more primitive than that of the earlier Sumerian age.

Under these circumstances a comprehensive outline of cuneiform law is possible solely as a comparative description of various legal institutions, to the extent that their juridic structure and their economic and social functions have been discovered. Such work unfortunately has been done only to a slight degree and least of all for the neo-Babylonian legal documents, which have been known longest of all. Hence this outline must necessarily be somewhat incomplete.

The oldest cuneiform records extant are administrative texts—notes upon fields and deliveries of goods. This is true of the archaic clay tablets from Jemdet Nasr, which are still purely pictographic, and of the documents from Uruk, some of which are even older. Thousands of such records, especially those of temple administrations, are the outstanding feature of the Sumerian period as a whole. The oldest juridic records in our possession, however, are stone inscriptions containing lists of deeds to plots of land. At a very early date, at least as early as the Old Babylonian period, there occurs the private business document, such as the so-called case tablet, in which the text is repeated upon the enveloping clay casing with the seals of the witnesses regularly stamped upon it. This double document, which was probably intended to protect the text against forgeries, spread to Assyria, to the Subaraeans, where the outer text was shortened to a heading. It is completely missing in the neo-Babylonian period, but is found in a form adapted to other writing materials in Palestine, in Egypt under the Ptolemies and among the Romans. It is possible that it was borrowed from the Orient, but this cannot be proved. With regard to content the business document always remained an objective protocol before witnesses, who do not appear in the administrative text.

The conclusion of the contract was set forth briefly as having already taken place, because the document was not written by the parties to the contract but by professional scribes (*dup-sharru*), who were trained in schools. It was in these schools that there developed what may be called cuneiform jurisprudence. Its achievements were chiefly confined to the drawing up of business forms, and only in the neo-Babylonian period did they become more flexible. A proof of this is the Sumerio-Akkadian series *ana ittišu*, consisting largely of such forms, which developed in the early Old Babylonian period.

Because of the political configuration of Babylonia in the Sumerian period, when individual cities contested for supremacy, law differed according to the locality. It was city law, although its basic concepts were everywhere the same by reason of the common civilization. Fragments of such Sumerian city laws are still extant. The first and only great code of legislation known to us is the Old Babylonian code of the greatest ruler of the first Babylonian dynasty, Hammurabi. Written in the Akkadian language, it was planned as a legal code for the entire kingdom. It consists of a compilation of older Akkadian and Sumerian laws and tends to strike a balance between the two legal systems. Then there are reforms made by the king—partly in the form of changes or interpolations in the draft code—who here displayed his social viewpoint, for he sympathized with the weak, which sometimes led him to excessive protection of the debtor. He considered himself the *šar mišarim*, the king of equity law, as contrasted with *kettum*, the fixed, rigid law. These concepts, which were evolved as early as the Sumerian period, might be compared with equity and common law. They are, however, theoretical concepts rather than living forces like the latter. It is doubtful whether the code was wholly applied in practice, for it had a certain learned stamp which led to the retention of obsolete legal provisions, as in the primitive rules governing offenses against property which threaten the defeated party with the death penalty. Nevertheless, the influence of this code upon the period must have been tremendous and it was regarded with high esteem as a literary monument in later centuries in Babylonia. A Middle Assyrian collection of court decisions and laws, the latter no doubt largely derived from an urban code of Assur, was probably the work of private individuals who modernized or glossed older laws by later additions. The first tablet, which was a code of laws regarding

women, has been best preserved; it contains provisions regarding marriage law and offenses by and against women. There is some doubt as to the nature of a collection of laws, principally criminal, found in the state archives of Hattušaš and written in the Hittite language. Although this collection, which survives in several editions, consists largely of laws it can scarcely have been published as a code in the form in which it has come down to us. It is rather an official collection of individual laws and decisions for the use of officials of the royal courts. Fragments of legal prescriptions, chiefly regarding marriage and inheritance law, which date from the neo-Babylonian period are of indeterminate nature. To these sources may be added private and official letters, documents connected with the management of private households, temple administrations and to a lesser extent the administration of the government.

These sources deal primarily with civil law or with economic management, such as that of the temples. Only the state archives of Hattušaš and of neo-Assyrian Nineveh furnish any considerable number of documents on governmental law and public administration, so that our knowledge of the state is meager. There is enough information, however, to dispel the widely held belief that the ancient East possessed only the despotic monarchy. This may be true of the Old-Babylonian, neo-Babylonian and neo-Assyrian kings, although a remarkable text makes it the duty of the latter to avoid arbitrariness and to respect the law; it may be true also of the state at the close of the Sumerian period, which had degraded the former city princes (*isag*) to mere officials. Its character is clearly expressed in the deification (which disappeared later) of the king. But even the Old Assyrian rulers seem to have been confronted with a considerable degree of urban autonomy, while the Old Assyrian trading colonies in Asia Minor had a republican form of government. As the state treaties found in Hattušaš show, the Hittite Empire was a federative alliance under the leadership of Hatti, and its rulers were probably linked to the dependent princes through feudal bonds. This was similar to the feudal relationship between the Syrian vassals of this period and the pharaoh, as is evidenced by the Egyptian king's correspondence with them, written in Akkadian and found in El-Amarna in Egypt. Within Hatti itself the king's position was far from absolute, being limited by a powerful aristocracy. The state possessed feudalistic

traits, which supposedly also characterized Assyria and Mitanni at this period. As for Babylonia the *kudurru*—phallus shaped stones with inscriptions regarding grants of land which were placed under the protection of the gods, whose symbols are inscribed in the upper half of the stones, or relating the royal grant of privileges to prominent men and families—are also a sign of the weakening of centralized rule. The small fief (*ilku*), consisting of land allocated for the support of soldiers and artisans, must be distinguished from feudalism proper, which appears to have been characteristic of the middle period. The small fief existed in all periods and was marked by a trend toward the gradual transformation of the fief into private property through inheritance and the right of disposal or toward the conversion of the original obligation of service into a tax.

Present day knowledge of the criminal law is derived largely from the criminal provisions of the laws, which are by no means inclusive. The criminal law is an affair of the state, as there is no vestige of private vengeance except in cases of adultery. But it is largely a private criminal law in that punishment is meted out on behalf of the wronged party and not of the state. This is true of fines as well as of corporal punishment, since the latter could be remitted contractually through the payment of a sum of money. In several cases in the Middle Assyrian code of law this is expressly stated and it may have been true to a wider extent. In addition there is the public offense, which is prosecuted by the state; its delimitations require further investigation. The concept of criminal guilt is outlined. The Code of Hammurabi and the Hittite law emphasize the deliberate deed in certain cases and punish it more severely. There existed moreover a concept of guilt over and above such individual cases, but it was thought of objectively. For instance, it was held that the receiver of stolen goods was not a person who knowingly bought stolen property but a person who contracted a purchase secretly, without witnesses. But indications are not lacking in the Code of Hammurabi and particularly in the Middle Assyrian code that the concept of guilt had already begun to be based upon the subjective attitude of the doer, upon his actual knowledge or lack of knowledge. Penalties were graduated according to whether the injured party were a freeman or a slave or according to the rank of the culprit. On the other hand, there was no differentiation as to criminal responsibility, as is indicated most

clearly in the Hittite code. This attitude corresponds to the relatively free position of the slave throughout the Near East; slaves were allowed to marry and to own a limited amount of property. Such leniency was probably due to the small number of private slaves, for the slave problem scarcely existed at all.

The *lex talionis* was the dominating feature in the penalties of the Code of Hammurabi together with the frequent death penalty and the fine, while corporal punishment as a specific penalty was of slight importance. The Hittite code is similar but does not contain the *talio* as a punishment. On the other hand, in Assyrian penal law corporal punishment (mutilation) and whipping play an important part, and in civil law the "bloody penalty" for breach of contract predominates. This and the outspoken description of sexual offenses, for which the refined Code of Hammurabi uses veiled terminology, are as characteristic of the Assyrians as the somewhat complacent admonitions of the Hittite lawgivers for leniency and forbearance are characteristic of the latter. Collective responsibility is of some interest—the liability of the community for the unknown criminal in the Code of Hammurabi and possibly in Hittite and Subaraean law as well and the liability of the criminal's family, which is evidenced in the Hittite code, although even here it is already declining.

Little is known of the civil trial. A large number of Sumerian documents (*di-til-la*) from Lagash in southern Babylonia dating from the last Ur dynasty reveal a fully developed governmental machinery of justice in the hands of the city prince and later a bench of judges. Such a set up accords with the general character of the period. The trial under Old Babylonian law was of a more private nature. The decision of the court was not binding but became so only indirectly, when the parties to the suit submitted to it through a document expressing the renunciation of the complaint (*duppu la ragāmim*). Unless such renunciation was forthcoming suit might be brought again. In addition there evolved an authoritarian jurisdiction of the king and of his officers, who passed final decision upon the disputes brought before them. The material on trials contained in the Old Assyrian, Subaraean and neo-Babylonian texts awaits systematic research.

The family organization of the leading peoples of the Near East was patriarchal, with the father ruling the house. It differed from the Roman *patria potestas* in that it did not necessarily last

throughout his life; nor did it exclude the personal property of members of the family, especially of the wife. Accordingly the monogamous marriage was a marriage by purchase or based upon purchase, although the documents differentiate in phraseology between such a marriage and a purchase. According to Old Babylonian law the bridegroom paid his prospective father-in-law a bride price (*tirhatu*). This was the engagement through which the bridegroom became the "owner of the wife" (*bél aššatim*) in accordance with the rules governing all buying and selling. The engagement became a marriage when the bride was handed over to the household of the husband or at least when a written marriage contract was drawn up. Thereafter only the husband might dissolve the marriage—the wife, who was merely an object of the marriage contract, had no right of divorce—while the prospective groom could cancel the engagement by surrendering the bride price or by returning it twofold. In Sumerian law, at least during the later period, the bride price was converted into a marriage present to the wife, which served to take care of her in case of widowhood and which later the husband often confirmed as a bequest. Consonant with the wife's improved status was the fact that she could under certain circumstances annul the marriage. According to the *di-til-la* documents marriage might be concluded also before a court. The bride price and the marriage gift are both to be found in the Code of Hammurabi; but the former was probably a result of the influence of Semitic immigrants, who transformed the social composition of the population toward the end of the Sumerian period. Marriage in the Middle Assyrian period seems to have corresponded in status to that under Sumerian law. The engagement no longer consisted of the payment of the bride price but of the presentation of engagement gifts (*zubbullū*), while the *tirhatu* became a marriage gift. Little is known of the Hittite marriage. Traces of marriage by abduction are indicated, while, on the other hand, there seems to have existed an engagement corresponding to that in the Code of Hammurabi, comprising the payment of a bride price (*kušata*). Among the Subaraeans marriage was a primitive affair. Not only was a bride price paid with sums fixed by law, but the bride's father like a vender guaranteed the eviction of the bride. For marriage under the neo-Babylonian law further research is needed. The bride price no longer existed, and it is doubtful whether there was a marriage

gift; but the wife's dowry (*nudunnū*) played an important part. This consisted not merely of her marriage outfit (house furnishings) but was ordinarily a capital fund (money, land and slaves) which remained the wife's property and which was inherited by her children after her death. Its proceeds were used by the household and managed by the husband. The *mulugu* of Subaraean law, which often involved the partial return of the bride price, was a similar institution. The Code of Hammurabi provides for a dowry (*šeriktum*) similar to the neo-Babylonian *nudunnū*, whereas, peculiarly enough, only the *nudunnū* is mentioned in the documents, being looked upon rather as merely a marriage outfit.

The Middle Assyrian code provides for a marriage without a common household, in which the wife remained in her father's house and merely received visits from her husband. This marriage form, with freer position of the wife, goes back to a marriage without bride price, which originally made neither the wife nor the children subject to the power of the husband. It exhibits, however, the tendency to approach the patriarchal marriage by purchase. Traces of a peculiar family organization, in which instead of the father the oldest brother presided over the family, are to be found in the second millennium in Armenia, Arrapha and Elam. This "fratriarchal" family is connected with the family community which expects centralized leadership by the most experienced; that is, the oldest. In this case on the death of the head of the family this leadership passes not to his sons but to the younger brother and so on. In part, for example in Elam, the "fratriarchy" can be explained on the basis of an original matriarchal family, in which the brother replaces the father, who remains outside the family (avunculate). At the time of the sources the fratriarchal family is everywhere in the process of being transformed into the patriarchal.

Inheritance was patriarchal also. According to Sumerian law only the son was an heir, since he alone was able to continue the family. The first born son is given preference in south Babylonian law of the Old Babylonian period as well as in Middle Assyrian and Subaraean law. If the estate of a childless testator was handed over to relatives, it was an acquisition of the estate but not an inheritance. Likewise the daughter was excluded from the line of inheritance, and if she did inherit—because of the absence of sons—she was not called the heir; in such a case circumlocutions were employed, as, for example,

"successor to the estate," *ridīti warkātim* in Old Babylonian law. In neo-Babylonian law the line of inheritance was materialized into a mere acquisition of property; the person "obtaining the estate" was the heir. Under such circumstances the will was of no importance. What is found in the way of testaments belongs under the heading of family law, the testator without a son being able to adopt a son as his heir while still alive or at the time of his death (by *aplūtu*). In addition to this "genuine" adoption, Old Babylonian law provides for a variety of forms of adoption, which involve a mere guardianship relation between the parties rather than inclusion in the family. This was especially true of minors and women. Besides the adoption will there are evidences of parental distribution in all periods, particularly developed as *šimtu* (provision) in Subaraean law. This distribution of the estate among the family (wife and children) according to the rules of legal inheritance is related to the making of gifts in case of death, which is found in Sumerian and Old Babylonian law as referring to individual gifts and which might involve the entire estate according to neo-Babylonian law, taking the place of the adoption will. Here again, however, distribution usually did not extend beyond the immediate family, and freedom of testamentary disposition did not exist.

Characteristic of Babylonian civilization were the *hieroduloi*, who formed a special caste of temple slaves (*širkū*) in the great temples of the neo-Babylonian period; there were also free *hieroduloi*, including even the king's daughter. More is known concerning the female *hieroduloi* of the Old Babylonian period; these were forbidden to have legitimate children, whether pledged to prostitution or to chastity. The female votary could therefore have no heirs, and the wealth given her by her father at the time of her dedication passed to her brother after her death, unless her father named another as heir or allowed her free disposition of her property. Certain *hieroduloi* were even allowed to marry but were replaced by concubines for the bearing of children. According to Sumerian law, when the wife was sterile, even the children borne the husband by a prostitute were legitimate.

There are various forms of land tenure in cuneiform law. The need for regulating the periodic floods in Babylonia favored the aggregation of men into large units from earliest times. In northern Babylonia clans were the units of political organization and owners of the land in the

Old Akkadian period. In the south the very oldest legal finds indicate the existence of private property, landownership being concentrated in the hands of prominent families, however, especially of the city rulers. In Akkad the clans were deprived of their land by the king partly through purchase and also by the use of force. If we may generalize the course of development in Lagash in southern Babylonia, this process seems to have continued during the subsequent centuries until toward the end of the Sumerian period all land had become the property of temples and of the state. Houses and gardens were privately owned, but not tilled land; this accords with the rather pronounced state socialistic character of the period. The population, ordered in castes according to trades, lived largely for and through the state; state economy was predominant and with it a vast bureaucracy, which also managed the public storehouses. The economic status of the individual seems to have been for the most part poor, as is indicated by the frequent evidence of the sale of children. Nothing is more characteristic of the social transition to the Old Babylonian period than the reappearance of private land tenure. In this period the state also took over an extensive governmental economy from the Sumerians. The predominance of large estates would correspond to the feudalistic nature of the middle period. In fact it is assumed that Babylonia during the Cassite period was characterized by the collective ownership of families possessing political power. It is possible that family communities owning considerable land existed in Middle Assyria, while in Arrapha the evolution of large estates can be followed directly from the documents for various families. But little is known as yet of conditions during the neo-Babylonian period.

Acquisition of private property was chiefly by purchase. Personal property was acquired by transfer, while the purchase of real estate is attested by documents. The same holds true of slaves, cattle and, especially in Babylonia, temple benefices. Purchase was always effected for cash in accordance with certain forms; that is, direct exchange of money for commodities. The purchaser acquired full title as soon as the price was paid. Title became final with the transfer, which might be replaced by the document. The renunciation clauses which are characteristic of the Old Babylonian deeds, especially the clauses affecting the seller, are related to this custom. The sale adoption of Arrapha is peculiar. In

order to evade an inalienability of real property, which may have been due to feudal institutions, the seller adopted the buyer and then transferred the land to him as a son by means of *šimtu*, since inheritance existed, the buyer giving a "present" instead of the cash price in return. According to the older Sumerian, Middle Assyrian and Subaraean law an act of publication was connected with the purchase, which made the transfer of land publicly known and incontestable. The sale was publicly proclaimed by the herald, who stated that third parties who did not make a protest at the time would lose all claims thereafter. Then there occurred another documentary verification, which if carried out before the court made the publication unnecessary in Arrapha. The *kudurru* possibly also performed a publicity function. As a form purchase for cash the transaction could not create any obligations, either for the delivery of the goods or for the payment of the price, nor could it deal with any but separately stated objects. Therefore if the selling price was to be credited, a special credit transaction was necessary. According to the concepts of cuneiform law the sale of bulk commodities, such as grain or wool, was not a sale at all but took the form of a loan or material contract. In other words, if it were a credit sale or a sale by subscription, the buyer declared that he had received the goods, and the seller that he had received the price, both promising equivalent considerations.

The widespread acceptance of the idea that the Babylonians were a trading people requires some reservations. While this may be true of the Old Assyrian period, we have no sources for the Middle period, and the neo-Babylonian period has not been adequately investigated. It is scarcely true of the Sumerian and Old Babylonian periods. This does not mean that there was no trade; but most of the trading was in the hands of the state, and the *tamkarum* so often encountered for this period was not a private merchant but a semigovernmental functionary. The trading company, in the form of the *commenda*, was of lesser importance and rather simple. A capitalist (*ummeānum*) gave his traveling partner capital for a single trading voyage, retaining a claim to the repayment of the capital and to participation in the profits. Credit was undeveloped, being granted only for short terms and repayable as a rule at the next harvest; thus credit was largely agricultural. The chief form of credit transaction was the loan (money or commodity loan, with various rates of interest; in

the Code of Hammurabi the legal maximum interest rate is fixed at 20 percent and $33\frac{1}{3}$ percent). As a fictitious loan, separated from the object of the loan, however, it could by virtue of the document incorporate other causes of debt as obligations, such as the mortgaging of a purchase price debt. There was furthermore the obligation note (*i'iltum*), in which the creditor was stated to have capital upon the debtor, which the latter would repay. It is characteristic that this form is rare in the Old Babylonian period, that it dominated the commercial activity of the Old Assyrian period exclusively and that in the neo-Babylonian period it displaced the loan almost entirely. The *i'iltum* was an extremely flexible debt form, a written promise to pay, which might incorporate any cause of debt and which might also appear abstractly, separated from any debt cause. It is comparable to the Roman *stipulatio*, with which it shares a common origin from a warrant of security. To that extent it is an indication of rather active currency circulation.

The securities for a debt were the suretyship and the pledge, the former being especially prevalent in neo-Babylonian law. The terminology of the suretyship involves as in other systems of law a gesture of the hand (handclasp, raising the hand) as the original form of bond, through which the warrantor's liability is pledged with his body. The pledge is in its oldest form always one entitling the creditor to possession and usufruct, the latter covering either the capital and the interest or only the interest. In the latter case the pledge was forfeited if the pledged debt was not repaid; that is, the creditor received final title to the pledge instead of receiving payment of the debt. Hence neither the body nor the property of the debtor was liable for repayment of the debt, in addition to the pledge. The debtor was not obliged to pay the debt but merely entitled to redeem the pledge with the amount loaned. From this point evolution continued, first to the possessionless pledge or mortgage, which was designated as such in Old Babylonian and in Elamitic law and which was marked in Elam by an act of publicity, such as the driving of a pledge post into the pledged piece of land. It is found also in Middle Assyrian, neo-Assyrian and neo-Babylonian law. Then there was the sale pledge, of the conversion of which we know but little. It may be postulated, however, from the agreement for the debtor's personal liability for the debt, which is found in Middle Assyrian, neo-Assyrian and neo-Baby-

lonian law. For the sale pledge must have become of practical importance as soon as the sale indicated that the value of the pledge was less than the amount of the debt. But the older form of pledge persisted. In general pledge law was relatively primitive, and there was scarcely any developed form of land credit. In the documents there are found as pledge objects plots of land as well as persons (slaves and freemen, children, the debtor's wife and even the debtor himself). In the case of freemen the forfeiting of the pledge had originally to result in the enslavement of the pledged person. Apparently the Code of Hammurabi successfully prohibited this. But it still occurs in Old Assyrian law and probably in Middle Assyrian and Subaraean law as well.

The pledging of a freeman as a usufruct pledge to the creditor is a form of exploitation of another's labor power, and the latter must also have been of considerable importance in the form of the free labor contract, in view of the slight extent of slave labor. Proof of this is found in the wage scales for various classes of artisans in the Code of Hammurabi and in the Hittite laws. The documents of the Old Babylonian and neo-Babylonian periods furnish an incomplete picture of conditions, no doubt because a large proportion of free labor was performed for the state and the temples, and this cannot be considered a private labor contract. The form of labor contract was derived from the renting of slaves. There are evidences also of another type in the Old Babylonian period, in which a worker or the foreman of a group of workers received a payment on account of wages, agreeing to come to work, either on his own behalf or on behalf of his comrades. These were seasonal (harvest) laborers, who were held strictly liable for non-fulfilment of the contract in accordance with special laws because of the importance of harvesting. They indicate also the existence of large estates, which required large numbers of outside laborers during the harvest season. Numerous rent and lease contracts dating from the Old Babylonian and neo-Babylonian periods are also extant, but it cannot be proved from the former class of contracts whether a considerable proportion of the urban population lived in rented quarters. The importance of leases is indicated by their detailed regulation in the Code of Hammurabi. They are found in various forms, as interest lease or partial lease, depending upon whether it was plowed land, plantations or land to be made arable. In the neo-Babylonian period

it is found also as a lease in consideration of an impost (*imittu*) upon the lessee, to be fixed at a later date. This was possibly the form of lease for the dependent peasants of temples and large estates. Moreover the leases were made for small plots of land and ordinarily, with the exception of leases for virgin land, covered only the term of a single harvest.

PAUL KOSCHAKER

JEWISH. In any discussion of the Hebrew law of the Biblical period the codified law must be differentiated from the popular or customary law as revealed in the narrative portions of the Bible. The legal ideas and practises revealed in the Biblical stories conformed to the living conditions and environment of the Hebrews of that period. On the other hand, many provisions of the codified law were the expression of religio-ethical standards far in advance of their time and as a result they did not permeate the life of the people until much later. For example, the law requiring the liberation of Jewish slaves after six years of service was not actually observed at the end of the first temple, while the observance of the law regarding the annulment of all debts during the sabbatical year (*shemitah*) met with difficulties even at the time of the second temple. These discrepancies between the religio-ethical principles which formed the motives for these laws and actual legal practise are reflected in the jeremiads of the prophets, who attacked such violations.

The codified Biblical laws according to the period of their composition are usually classified as follows: the Decalogue (*Exodus* xx: 1-17; *Deuteronomy* v: 6-19); the Covenant Code (*Exodus* xx: 23; xxxiii: 19; and xxxiv: 17-26); the twelve curses of Mount Ebal (*Deuteronomy* xxvii: 15-26); the Deuteronomic Code (*Deuteronomy* xii-xxvi); the Holiness Code (*Leviticus* xvii-xxvi); and the composite Priestly Code. All that is known historically is the existence of the book of *Deuteronomy* in the Kingdom of Judaea during the reign of Josiah and of the codified laws of the Pentateuch during the period of Nehemiah and Ezra. Many legal prescriptions in all parts of the Bible are, however, extremely ancient, as is proved by comparison with Assyrian and Babylonian law.

Popular, or customary, law as depicted in the patriarchal narrative was derived chiefly from the experiences of a nomad people. The codified laws of the Pentateuch go back to a later period when the population consisted mainly of peasant

landowners, with foreigners, chiefly day laborers or those engaged in trade and various crafts, living among the peasants. Biblical law contains no references to large scale land tenure or to highly developed commerce. The foundation of the social structure was the tribal community, which was divided into families and kinship groups. The kinship group was headed by its chief, whose authority in the earliest period was so great that he could even pass sentence of death upon the members of his group (*Genesis* xxxviii: 24). At a later period the authority of the head of the family diminished; according to the codified laws of the Pentateuch the father could not judge a rebellious son, who had to be haled before the elders upon the complaint of both parents (*Deuteronomy* xxi: 18-20). The elders usually held court at the city gate. Later the authority of these elders was restricted by the organization of centralized courts which acted as courts of appeal. These central courts were located at the sanctuaries, especially at the time when trial by ordeal was employed or when the disputants were sworn under oath at a holy spot.

An urban civilization began to develop in the period of the kings, particularly around the residences of the royal officials, the fortified towns and the places where the battle chariots were kept. These new conditions destroyed the old tribal organization in large measure, for considerable land was taken away from families and concentrated in the hands of the king's kindred. The prophets often refer to the conflicts which arose out of the development of urban civilization, but we find no legal privileges for the upper classes in the codified laws of the Bible. In this period the judicial functions were centered in the king as the supreme judge and the royal dignitaries, who gradually began to participate in the elders' courts, where they soon gained a dominant influence.

During the entire period of the first temple the tribal organization persisted in land tenure. A member of the family was allowed to sell his inherited land, but his relatives were entitled to repurchase it from the buyer. This right still existed at the time of the prophet Jeremiah (*Jeremiah* xxxii: 8). The law providing that sold real estate should return to its original owner in the jubilee year (if this was in effect in the pre-exilic period) was based upon the family's joint rights of ownership in inherited real estate and at the same time represented a periodically recurring distribution of real estate among its

members. In *Leviticus*, however, the religio-ethical factor of the jubilee law is given greater emphasis.

The Biblical law of inheritance was based upon paternity, in conformity with tribal organization: the sons inherit; if there are no sons, the property passes to the daughters. If no children survive, the estate goes to the brothers of the deceased, and if there are none, to his sisters; if there are no brothers or sisters, the heirs are his father's brothers or sisters and so on. Since in the case of a female heir the estate would pass to another tribe if she were to marry into it, it was enacted that such an heiress must marry within her own tribe (*Numbers xxxvi: 8*). The levirate marriage (of a widow whose husband died without issue) is also linked with the concept of family organization. The widow was to remain in the family community and marry a relative of her late husband in order that the dead man's estate should not leave the family, and the first son born of this marriage was considered as the dead man's child (*Genesis xxxviii: 8; Ruth iv: 5*); it is likely also that this son was the dead man's heir (*Ruth iv: 6*). According to the codified law of the Bible a widow might marry only the brother of her dead husband if the latter had died without issue, but she was also afforded a way (*chalizah*) of marrying out of the family (*Deuteronomy xxv: 5-10*). A woman was under her father's tutelage. The husband was entitled to dissolve the marriage bond. But many narrative passages in the Bible indicate that woman was in many respects independent (*Judges xvii: 3-4; I Samuel xxv: 18-19*) and even, as is shown in the case of Deborah, participated in public life (*Judges iv: 4*).

Slavery involved mostly slaves of non-Jewish descent. According to the codified law of the Bible the Jewish slave was freed at the end of his sixth year of service, the master had to take his Jewish maidservant as his wife or marry her to one of his sons (*Exodus xxi: 1-11; Deuteronomy xv: 2*). Narrative passages in the Bible indicate that insolvent debtors were sold as slaves to redeem their debts (*II Kings iv: 1; Nehemiah v: 2-5*), but in the codified law of the Pentateuch it is stated that only the thief who cannot make good the damage caused by his theft is to be sold into slavery (*Exodus xxii: 2*). Thus only the non-Jewish servant was a slave in the full sense of the term, but even he was not considered merely his master's property. If the master killed him, he was punished, while if he blinded him in one eye or knocked out one of his teeth, the injured slave

regained his freedom (*Exodus xxi: 20-21, 26-27*). The prescription in *Deuteronomy xxiii: 16*, "Thou shalt not deliver unto his master the servant which is escaped from his master unto thee" represented a not inconsiderable alleviation of the slave's lot. But in practical life this humane provision no doubt had no binding legal force, and at the period of the Talmud it was interpreted in a restrictive sense (*Gittin 45a*).

In the codified law of the Pentateuch the provisions regarding debts are humane in spirit: the charging of interest on loans among Israelites was prohibited. The sabbatical seventh year (*shemittah*) caused the annulment of all debts. With the increase in commercial activities this law came to be too oppressive, and toward the end of the period of the second temple the *prosbol* was introduced in order to lessen its effect. Moreover provisions were included in the Pentateuch to protect the debtor in case of forfeits. The creditor was forbidden to enter the debtor's house to levy on anything; he could not levy on a mill, and according to general interpretation this exception was held to apply to all necessities of life. If the forfeit was an article of clothing, it had to be returned to the debtor before sundown.

According to the old common law punishments were applied in certain cases to the whole kinship group of the evildoer (*Joshua vii: 24-25; I Kings xxi: 13; and II Kings ix: 26*). In the codified law it was stated: "The fathers shall not be put to death for the children, neither shall the children be put to death for the fathers: every man shall be put to death for his own sin" (*Deuteronomy xxiv: 16*), and King Amaziah dealt with the murderers of his father according to this law (*II Kings xiv: 5-6*). A sharp distinction was made between murder, which called for the death sentence, and homicide, which provided for flight from the avengers to a place of asylum (*Exodus xxi: 12-13*). The *lex talionis* was applied to the infliction of bodily injury; in cases where the victim was unable to work the offender was required "to pay for the loss of his time" and to "cause him to be thoroughly healed" (*Exodus xxi: 18-19*).

There are many similarities between the codified law of the Bible and the laws of the Babylonians, Assyrians and Hittites. But Biblical legislation is distinguished from the other ancient systems of law by its inherent religio-ethical principle, which lends it universal historical importance. This principle was expressed as early as the Decalogue (*Exodus xx: 16-17*) and is

clearly reflected in many legal standards: the principle of freedom of the person, which is the foundation of the equality of all classes; the limitation of a Hebrew's period of slavery to six years; the legal protection of the non-Jewish slave, the foreigner, the debtor and the poor. The provisions regarding the purity of the family are stricter and unchastity was punished much more severely than in other ancient codes. The humane spirit of Biblical legislation is also expressed in the provisions for protection of animals.

The Biblical canon was established during the period following the return from the Babylonian Exile, and from this time its legal prescriptions possessed the authority of a binding code of law on the life of the Jewish people in Palestine. The brevity of these laws and their inadequacy for all the requirements of life seem to indicate that there were many old legal norms and customs, not mentioned in the Bible, which were looked upon as supplementing Biblical legislation. They formed the basis of the traditional, or oral, law. Furthermore there were many altogether too concise and insufficiently clear passages in the Bible which required elucidation and many new questions of law arose for which solution was sought in the Bible. As a result of these needs there developed a method through which, by means of interpretation, analogy and minute dialectical and hermeneutical differentiation, new explanations of Biblical passages were made possible as well as extensions of the provisions of the law. Later this method was also used in order to lend force and authority to new laws and to give them foundation, or at least a semblance of foundation, in a Scriptural passage. The first era after the completion of the Biblical canon, that of the scribes, was devoted to such elucidation and interpretation, and at the same time to placing the oral juridic traditions on a firmer basis. Although no legal sources have come down from this period, many of its doctrines have been preserved in later sources, such as the Apocryphal books, the works of Josephus and Philo and the legal portions of the Talmud.

During the period of the second temple the legally binding character of the oral tradition was not always recognized by the forces in power. The Sadducees, unable to abjure the authority of the Bible, made use of a literal and very rigorous interpretation of Biblical law in order thereby to deny in toto the oral tradition of the Pharisees. Thus they found it possible also to introduce Greek and Roman ideas and institu-

tions so as to provide for instances otherwise covered by the oral law. Toward the close of the Hasmonaean period, after the Pharisees had gained the upper hand, the *Sefer geseroth* (Book of decrees) of the Sadducees was abrogated, and the day on which the decree was promulgated was fixed as a national holiday. Only a few of the laws introduced by the Sadducees have been preserved in the Talmud. For example, the Sadducees held that "an eye for an eye" should be taken in its literal meaning, while the Pharisees felt that a money payment for damages was sufficient. The Sadducees extended the right of inheritance to include daughters. Philo (*De specialibus legibus*, bk. ii, sect. 125) held that unmarried daughters were entitled to share in the estate.

During the Herodian dynasty Rome's influence was very extensive and the royal decrees often conflicted with the traditional juridical principles of the people. An echo of their complaints against Herod's innovations in the legal sphere, particularly with regard to Jewish slaves, is to be found in Josephus (*Antiquities* XVI: 1, 1; XVII: 6, 2). As a result of the conflict between the government of the kings and the Pharisee scholars as the guardians of tradition, which continued throughout the period of the second temple, not a trace of the kings' legislative activity remains in the traditional law as conserved in the Talmud.

Similar conflicts between the Pharisees and the Sadducees took place in the judicial tribunals of the period. The great Sanhedrin, consisting of seventy-one members, was alternately dominated by the Pharisees and the Sadducees. The local criminal courts, the small Sanhedrin, composed of twenty-three members, and the courts which according to Josephus consisted of seven members (*Antiquities* IV: 8, 14; IV: 8, 38) but which the Talmud states had but three were affiliated with the local administration; and during the periods when the Sadducees had the upper hand these courts were under their influence. This condition persisted until the ultimate victory of the Pharisees.

For a long time the Jews were disinclined to put these traditional laws in writing because they did not want to place them on a footing of equality with Scriptural doctrine; but during the era of the second temple, particularly after the period of Hillel and Shammai, a beginning was made in the editing of these laws. After Hillel's doctrines had gained general acceptance systematic editing was undertaken (at the commencement of the second century A.D.) by Rabbi

Akiba; it was improved by his disciple Rabbi Meier and brought to completion at the end of the second century by Rabbi Judah Hanassi. This edited collection of laws of Judah Hanassi is called the Mishna. It consists of the following six parts or orders: *Seeds*, dealing with agricultural laws; *Festivals*, with the laws of the Sabbath and holidays; *Women*, with laws of marriage and divorce; *Damages*, with civil and penal law; *Sacred Things*, with sacrifices and temple rites; *Purifications*, with laws of purity of things and persons. This material represents a selection from the abundance of source material and is phrased in concise and lucid form. Legal material which was not included in the Mishna has been preserved in what are known as *beraithoth*, and there is a special collection of this material called the *tosephta*. Some of the laws of the Mishna and the *beraithoth* are of very ancient origin, while others are of later date. In the *beraithoth* can be discerned even later additions dating from the period after the completion of the Mishna. The date of origin of these laws of the Mishna can be deduced particularly from their style, their content and the scholars mentioned in them. Many passages of the Mishna cite differences of opinion between the rabbis without, however, stating which viewpoint is the correct one. Hence the Mishna cannot be looked upon either as a code or as the termination of an epoch. The orderly arrangement and clear style of the Mishna facilitated the study of the legal sources, and soon after its completion it became widely current among the Jews of Palestine and Babylonia. The Mishna was studied, elucidated and interpreted in the schools of these countries, just as the Bible had been interpreted in former times. Scholars discussed its various provisions and reconciled their apparent discrepancies, extended the laws and added new ones which fitted the needs of the times. This mass of material was collected in Palestine toward the close of the fourth century and called the Jerusalem Talmud or Gemara; in Babylonia this was done toward the end of the fifth century, the collation being called the Babylonian Talmud or Gemara. Because of the greater concentration of the Jewish population in Babylonia and the ascendancy of the Babylonian academies over those in Palestine at the end of the period the Babylonian Talmud is by far the more important of the two in its influence on Jewry. The combination of the Mishna and the Gemara is now generally referred to as the Talmud. By virtue of its keen dialectics and clear analysis the Gemara became

the foundation of later Jewish law and enhanced its adaptability to the changing conditions of life during the wanderings of the Jewish people; it was more effective in this respect than was the Mishna with its clear provisions and precise manner of expression.

The jurisdiction of the Jewish courts was restricted after the overthrow of the Jewish state. According to Talmudic tradition they were deprived of authority in criminal matters (death sentences) forty years before the destruction of the second temple. For the most part their jurisdiction still continued in civil cases; even during the periods of greatest oppression this right was retained, although the courts may have been used merely for arbitration. In Babylonia the Jewish courts exercised extensive jurisdiction under the rule of the exilarchs, especially in civil cases. Jewish courts had wide jurisdiction in civil cases and in the regulation of the inner life of the community in other countries as well. Devotion to tradition was strong enough to compel the members of the community through moral and social pressure to submit to the jurisdiction of their own courts, whose decisions at worst were pronounced as those of a freely chosen board of arbitration.

The Jewish courts in Palestine and Babylonia had the right of forcible execution of their decisions. Their weapon was often the anathema (*cherem*) or temporary exclusion from the community (*nidui*). The penalty of thirty-nine lashes was also imposed except in cases involving money claims. During periods when the governmental authorities were benevolently disposed toward the Jews the Jewish courts also had jails in which to confine the unruly.

The laws of the Talmud throw some light upon the economic conditions of the Jewish people at the time, who are shown to have been chiefly small peasants and tenant farmers. The latter usually farmed small plots of land which the owners could not cultivate. There are but slight indications in the Talmud of large scale land tenure among the Jews, perhaps because the big Jewish landowners often refused to subject themselves to the jurisdiction of the Jewish courts. Trade was confined largely to agricultural products, which were sold in the markets of towns or in neighboring countries. There is little or no reference in the Talmudic legal sources to any caravan trade in distant countries or to oversea shipping.

Talmudic law exhibits a high degree of organization and covers all the aspects of life. Tribal

organization and the family's joint tenure of land had disappeared by the very beginning of the era of the second temple. The principle of freedom of the person, expressed even in the Bible, is clearly manifested in the Talmud. Enslavement of Jews was unknown in practise. Everyone enjoyed full standing before the law. Women who had come of age were not placed under any sort of tutelage; they suffered only one disability—incompetence as witnesses—which was justified by the assertion that women are always dependent upon, and hence influenced by, other persons. The restriction of woman's right to inherit from her parents or her husband was taken over from Biblical times. On the other hand, many laws were introduced to ameliorate her position: husbands were obliged to make money payments (*kethubah*) and to provide support in cases of dissolution of marriage. The position of orphan daughters was likewise improved by the law stating that their support should be provided for out of their father's estate (in small estates the daughter's support took precedence over the son's inheritance rights), while their trousseau and dowry also had to be furnished out of the estate. A married woman could have property of her own (*melug*), although her husband enjoyed its usufruct. In the period following the destruction of the temple the wife's right to dispose of her private property was limited. On the other hand, the law did allow that suitable clauses be inserted in the marriage contracts providing that the husband have no rights in his wife's property; in such cases the wife was undisputed mistress of her property and in this respect had equal legal standing with men.

The methods of acquiring ownership were extended in the Talmudic era. Symbolic forms of taking possession, introduced to facilitate commerce, took on special importance. Often they became ways of taking over obligations, since in Talmudic law as in many other ancient legal systems the assumption of obligations was given a concrete and tangible interpretation. The Talmudic law of obligations, unlike that found in other contemporary systems of law, does not allow the collection of debt upon the person of the debtor or forfeit of his freedom. The security for obligations was in principle a material one; for example, a pledge of property. The inclusive pledge (general mortgage) was introduced among the Jews to increase the degree of security, and as early as the period of the Mishna it was widely employed. The formal basis for such a mortgage was a document drawn up before witnesses.

The principle of prohibition of interest on borrowed money was enforced very strictly. In order to facilitate credit use was often made of a partnership between the lender and the person who borrowed for business purposes, the borrower working actively in the enterprise. It was stipulated that profit and loss were to be shared between the two. According to the provisions of the Talmud the person managing the business was to get a larger share of the profits or was to be liable for a smaller share of the losses.

Although the Jewish courts ceased to exercise jurisdiction in criminal cases after the destruction of the second temple, many restrictions of the death sentence found in the Talmud go back to the time when judgment was passed upon such offenses. The *lex talionis* was abolished and suitable fines were introduced in its stead. In crimes involving the death penalty the increased requirements as to the necessary witnesses and other evidence and the provision that the offender had to be warned of the penal consequences immediately before the commission of the crime virtually excluded the possibility of imposition of the death sentence.

In civil trials the theory of evidence and its evaluation had reached a high stage of development. Testimony under oath was in widespread use at the time of the Mishna, being employed especially in those cases where one litigant was not sure whether or not the statements of his adversary were correct. During the period of the Gemara the general oath (*hesseth*) was introduced; the defendant had to take this oath in order to deny the complaint, and it was often used to determine the material facts in the case.

The Talmud has remained the highest authority in Jewish jurisprudence. In the post-Talmudic period attention was concentrated upon explanation of the Talmudic laws, systematic arrangement of the laws scattered throughout the Talmud and responses to inquiries concerning new legal problems. In urgent cases new laws and reforms were introduced, and endeavors were made to anchor them in the provisions of the Talmud. The Mishna was based upon the Bible, the Gemara upon the sources of the Mishna and later juridical literature was in turn based upon the Talmud. The centers of Jewish jurisprudence shifted—together with the Jewish people—from Palestine and Babylonia to northern Africa, Spain, France, Germany and Poland. During the period of the post-Talmudic Babylonian schools, which endured for several centuries after the conclusion of the Talmud, Tal-

mudic law continued to develop along the lines mentioned, and the work of codification began. The most important of the early steps in this process were the work of Isaac Alfasi (1013-1103) in north Africa, who rearranged the Talmudic laws, eliminating the dialectical controversies as well as the legal provisions which no longer applied at the time and leaving merely the part which actually applied to the Diaspora. He also added legal decisions dating from the post-Talmudic period. The most important codes of Talmudic laws, containing the legal as well as the ritual prescriptions, are those of Moses Maimonides, Jacob ben Asher and Joseph Caro. The *Yad ha-chazakah* (1180) of Maimonides contains a good arrangement of the legal provisions according to subject matter and is noted for its clear and precise mode of expression, resembling the style of the Mishna. In general it follows the contents of the Talmud, containing but few of the laws introduced after the Talmud's completion. The *Turim* (1327-40) of Jacob ben Asher is noted for a better arrangement and subdivision of the material and contains more new laws, but it often cites various points of view without deciding which is the law. It also lacks Maimonides' clarity and precision of style. The *Shulchan aruch* (1565) of Joseph Caro follows the *Turim* in the arrangement of the material but resembles the work of Maimonides in its conciseness and final decision as to what is legally binding. It does not compare with Maimonides, however, in clarity of expression.

The problem facing Jewish jurisprudence during this epoch was the adaptation of the accumulated laws, which had evolved in Palestine and Babylonia among petty peasants and small scale traders, to a new economic structure consisting of such vital factors as urban life, commerce, trade and financial affairs in the countries of the Diaspora, especially in Europe. This adaptation was rendered possible by the keen juridical analysis of the Talmud. This process of adaptation of Jewish jurisprudence to commercial life had begun as far back as the post-Talmudic period in Babylonia. Talmudic law had attached special emphasis to real property, in many respects ranking it above personal property. When the Jews turned from agriculture to trade and commerce, however, the decree of the Geonim at the commencement of the Islamic era established the equality of personal and real property. The symbolical acquisition of ownership in the Talmud was well suited to the transfer of ownership of movable goods. The obliga-

tion, which even during the Talmudic era represented fundamentally a pledge of the debtor's property rather than a *vinculum juris* among individuals—as in Roman law—was admirably adapted to becoming an article of commerce passing from one hand to another. The selling of obligation contracts is mentioned even in the Mishna, and in the Middle Ages traffic in certificates of indebtedness became widespread. As early as the thirteenth century promissory notes made out "to bearer" were known among the Jews, and in the seventeenth century the *mamram*, a note of hand very similar to the modern commercial note, was in common use among the Jews of Poland.

Proxies were already developed in Talmudic legislation and were used in many ways in the commercial life of the Middle Ages. The limitations of representation by proxy at trials, introduced at the time of the Talmud, were abrogated in the post-Talmudic period. During the Middle Ages endeavors were made to improve woman's position in family law (in so far as she had no right of inheritance) but these reforms were confined largely to the countries of the West. An expedient was introduced by which a daughter was enabled to inherit half as much as a son. The custom was introduced of inserting a clause in a marriage contract restricting the husband's rights to inherit his wife's estate, especially during the first few years of marriage; on the other hand, the wife's right to a share in her husband's estate was made more inclusive.

In the post-Talmudic period the anonymous ban of excommunication was introduced into trial procedure; it was usually pronounced against anyone doing "so and so" or making deceitful statements in court, without mentioning the name of the litigant or that of any other person. This method was used to compel the litigants to give true testimony. The custom was likewise introduced of making anyone asserting he did not possess any funds with which to meet his debts swear an oath of manifestation.

Jewish law gradually adapted itself to all the requirements of Jewish life in the countries of the Diaspora by means of legal statutes and reforms of this sort, so that all matters and business affairs were settled in accordance with this law. And since commerce was largely concentrated in the hands of Jews in many countries during the Middle Ages, the Jewish laws influenced the commercial legislation of other nations. The evolution of Jewish law continued down to the eighteenth century. As a result of

Jewish emancipation and the break up of the ghetto the Jews began to live and do business under the laws of the country in which they resided and the use of Jewish law in many fields of life and commerce was thereby limited. In eastern Europe, which is still the center of orthodox Jewry, Jewish law continues operative to some degree in commercial as well as family and inheritance matters. The Jewish tribunals are, however, more in the nature of courts of arbitration with only a voluntary submission on the part of the litigants to the jurisdiction and decisions of the rabbis. Some steps have recently been taken toward reestablishing Jewish law in certain parts of the life of Palestinian Jewry. The jurisdiction of Jewish religious courts has been recognized by the Palestine Order in Council of 1922 in many matters of personal status, such as marriage, divorce, alimony, guardianship, wills and the like. Tribunals of arbitration known as Mishpat Ha-shalom and organized to deal with ordinary civil and commercial matters have also come into use and in 1927 received official recognition by the British administration. They are regulated on the principle of the English Arbitration Act of 1889.

ASHER GULAK

GREEK. The sources of our modern knowledge of Greek law are extremely scattered. No law books are extant as for Roman and Germanic law. It is necessary to rely, in the first place, largely on epigraphic and literary records, chief of which are the judicial speeches of the Attic orators, and, in the second, on the ancient commentaries upon the literary records, often in the form of lexicons (Lexica Segueriana, Pollux, Suidas and the like). There survives only one ancient treatment of problems of Greek law, Theophrastus' fragment on contracts (*περὶ συμβολαίων*), dealing principally although not exclusively with the transfer of real estate. Chief among the available inscriptions are the so-called Code of Gortyn in Crete (first discovered in 1884 and last edited by Kohler and Ziebarth) dating from about the fifth century A.D. and the Draconic laws on homicide in the revised version which dates from the same century. Finally, Plato's *Laws* and to a lesser extent his *Republic* may also be considered as sources.

The so-called principle of personality was an axiom of Greek law. Wherever Greeks dwelt, every citizen of every Greek polity was to be judged according to the laws of his homeland. Greek law often influenced Roman law, espe-

cially in the establishment of the Twelve Tables, as is evident from their very mode of origin: the *decemviri legibus scribundis*, who drafted them, were not merely a codifying commission but also the highest magistrates, occupying a position that corresponded to that of the Greek *ἀστυνόμος* in many respects. In the Hellenistic period Greek law maintained itself largely unadulterated by oriental influences on the mainland of Greece.

The entire area of Greek law consisted of a number of small states, each with its own legislation. But by means of an intellectual process which singled out the inner unity and homogeneity of all these legal orders as their very essence there was achieved the concept of a uniform Greek civil law, transcending the diversity of the various Greek juridic systems. Since Greeks themselves felt their law to be a unity, one Greek polity would not object to taking judges from another or to adopting the laws of another, particularly the law of Athens. In point of content law was not looked upon solely as a human institution; it was assumed rather that it was based upon supernatural institutions, such as the *θέμις* and the *δίκη*. The former was the divine will, tending especially toward the views of the aristocratic upper class in power at the time. The latter was the sanctified concept of the specific rights of the individual under divine prescription; hence the term might also mean a lawsuit.

As among all other peoples law among the Greeks in the age of the epic poets was exclusively customary law (*ἔθνη*). While court practice and jurisprudence were of such slight importance among the Greeks that often their very existence cannot be evidenced, custom was comparatively influential, as in the law of pledge. The most important source of law, however, was the statute. The transition from customary to statutory law took place as a result of political struggles on the part of the oppressed classes of the population against the ruling classes, who controlled the courts. For this reason the Greek statute originally was not a norm to which all citizens had to conform, as in the modern conception, but rather a restriction of the unbounded free judgment of the authorities; i.e. instructions to the magistrate, who was obliged to execute the statute. Consequently the statute was at first generally named after the authorities to whom it applied. Thus in Athens the statutes were differentiated into four classes: the statutes applying to the council (*νόμοι βουλευτικοί*), stat-

utes for all officials (*νόμοι κοινολ*), statutes for the nine archons (*νόμοι τῶν ἐννέα ἀρχόντων*) and the statutes for other officials (*νόμοι τῶν ἄλλων ἀρχόντων*); the legislation for the chief archon, called *νόμοι τοῦ βασιλέως* and dealing with ritual and criminal matters, predominates in the first group of laws. Because of the close connection between the concept of the statute and the official charged with its execution the statutes were officially published and exhibited, so that they might be constantly before the official concerned and the citizens having recourse to them. Thus the laws of Gortyn were discovered on the circular walls of a public building. In Athens the regular place for publication of the statutes was the royal hall, which was long the center of administration. Only rarely and at a much later date were the statutes named after the subjects dealt with: statutes on foreigners, on commerce, on homicide and on mining (*νόμος ξενικός, ἐμπορικὸς, φονικὸς, μεταλλικὸς*). It must not be supposed, however, that a specialized commercial or mining law ever developed or that the statutes applied only to citizens, with foreigners subject to the unrestricted rule of the magistrates. While later speculation, such as that of Plato and Aristotle, divided Greek legislation into the *νόμοι* and the *πολιτεία*, thus distinguishing between ordinary and constitutional legislation, actual practise knew of no such distinction. All lawgivers were called *νομοθέταις*, even if they only drafted constitutional laws. There are other names for a statute than *νόμος*, such as *ρήτρα* (bilateral contract, promise), *ἄδος* (placitum) and *θεσμός* (a norm established by an external and superior power). Like all law the statute appears as the emanation of a general, metaphysical order, and various consequences were conceived to follow necessarily from this. Like must be treated alike: every citizen must be equal before the law (*ἰδιονομία*). Again, the Greeks recognized the existence of a *νόμος ἄγραφος*, denoting general natural law as distinguished from specific positive law and conceived at the same time to be a necessary component of every positive law, which since it was based upon equity and good morals did not need to be expressly written down. Finally, the statutes were themselves supposed to be of divine nature and the lawgiver was considered to be inspired by the gods. In the archaic era opposition to changes in the statutes went so far as to threaten punishment for proposals to amend them. Later, *νόμος* and *ψήφισμα* (decree) were often differentiated: while the latter was actually

often an amending statute, it was not supposed to conflict with the former. Changes in the statutes were made by the submission of proposals for such changes to a special commission, which in turn submitted proposals to the assembly of citizens.

Originally Greek laws were often transmitted by memory only; thus in historical times there was in the city of Mazaka a special official "singer of the laws" for the laws of Charondas there in force. Lycurgus prohibited the writing down of his laws. On the other hand, in historical times the city-state made official collections of its laws. Thus in Athens there were the *κύρβεις*, booklike racks for the laws of Solon, and in Sicyon the *πινακίδες* (tables). The frequently mentioned procedure of recording the laws refers to their preservation in the state archives. The literary transmission of the laws in such a work as that of Theophrastus, already alluded to, was indirect because it represented a systematic collation and not merely a reproduction of the Greek statutes. But there also were works which gave the wording of the statutory provisions, such as an edition of the laws of Solon by Aristotle, as well as the *πινὰξ νόμων* dating from the period of Alexander. New laws were also sold on the street, as mentioned in Aristophanes' *Birds*.

Since the growth of Greek law was closely bound up with the nature of the state, it is necessary to distinguish the period before the rise of Greek democracy, the so-called heroic age, from that of the democratic constitutions. During the former period customary law prevailed, almost exclusively as it seems; the latter was the age of the great lawgivers, such as Charondas of Catana, Zaleucus the lawgiver of the Epizephyrian Locrians, Lycurgus of Sparta, Draco and Solon of Athens, Hierocles of Syracuse, Pheidon of Corinth, Philolaos of Thebes and many others. The literary transmission of legislation often contained stoic elements, which although the result of later political theory were attributed to the old lawgivers.

In view of the slight development of Greek jurisprudence it is impossible to speak of a "spirit of Greek law." There are, however, certain general principles which permeate all Greek law, such as requirements of form or publicity. The most important form is the hand rite, i.e. the representation of a person's legal authority by means of the hand, as in engagements, and even more strictly in the ceremonial of marriage by the *ἐγγύησις*, requiring the guardian to hand

the bride to the bridegroom. Likewise, the guarantor (ἑγγυος) handed himself over to the creditor. Publicity is the linking of the state's authority with a legal transaction. It was employed in the transfer of real estate, as reported by Theophrastus, in the securing of an inheritance and in the liberation of slaves (there were also private forms of liberation). In Athens, where either the husband or wife could obtain a divorce, apparently only the latter, who had to declare personally to the archon that she wished a divorce, had to meet a requirement of publicity. The requirement of publicity is also found in the ἀποκήρυξις, i.e. the expulsion of a child from the home by means of the herald's cry, as well as in adoption.

Publicity was also secured by the archives, the group of public institutions whose primary function was to preserve documentary records of matters of legal importance. The precursors of the archives were the μνήμονες (remembrancers) as well as private document keepers, συγγραφοφύλακες. The real origin of the archives was the membership lists of the groups into which the population was divided, such as the phratries and the phylae; these adopted the practice of recording marriages, the root of the present system of vital statistics. Further developments occurred in the Hellenistic period.

The most important factor in the Greek law of persons is the difference between freemen and slaves. The latter were divided into the οἰκέτης, the slave who worked in his master's household or business concern and was incapable of owning property, and the δοῦλος μισθοφόρος, the half free slave, who lived outside his master's household and evidently merely paid him a fee at regular intervals. Such a slave could transact business and could be sued. In addition to slavery there were such forms of serfdom as that of the penests in Thessaly and the Helots in Lacedaemon. There existed also the pledging of one's person for debt, which might give rise to the peonage of the debtor; in this case he was settled upon one of the creditor's estates and had to deliver to him a part of the produce of his labor. If the debtor was injured, the fine was shared by the creditor and the peon; but as long as the peonage lasted the creditor alone could bring suit. The difference between the native and the alien was of importance in the various classes of the wholly free population. Although at first the alien was without any legal rights, a special treaty procedure evolved from the legal aid treaties, particularly from their prohibitions

arbitrarily depriving an alien of his property or freedom of person, and later a special alien procedure was incorporated in the body of the domestic law. Rarely was the alien granted the right to purchase real estate or to marry, i.e. the right to contract a fully recognized marriage with a wife from among the native inhabitants. He was, however, wholly subject to the provisions of the criminal law. In addition to individual persons Greek law defined associations (which were guaranteed freedom of association by Solon) and foundations, both independent and subsidiary. The latter class included foundations administered by another juristic person, as, for instance, a city. Gods, the dead and even animals were recognized as legal subjects.

In historical times individual ownership was recognized not only with respect to goods and chattels but also with respect to real estate. Vestiges of collective ownership of real estate, however, still persisted. It was exercised by the clan (γένος), although the family was also considered to be the collective owner of the family property; a survival of this point of view, for example, was the designation of real estate as κλῆρος, i.e. lot. This meant that the use of the land changed by lot within a certain circle of persons, that is, the clan, which was the real owner. The most ancient case of private ownership of goods and chattels was the portion of the dead, i.e. armor and ornaments which were placed in the grave. The booty and plunder of war also played an important role in the origin of property. There is no Greek expression for the abstract right of property. Property and inheritance disputes were subject to the system of the so-called διαδικασία, a form of action for testing the right of tenure. Thus no investigation was made (as in the more highly developed Roman law) of the absolute justice of the plaintiff's and the defendant's case; the relative merits of the two were merely considered, so that even the person in possession was compelled to prove his right. The ownership of an estate might belong to several persons (with or without actual division), so that, for example, plots belonging to different owners might all lie within a single fenced in estate. Servitudes did not exist, while hereditary leasehold (emphyteusis) is found only during the Hellenistic period. On the other hand, the law of pledge was highly developed. There were distinguished the ἐνέχυρον (dead pledge), the hypothecation and the ἀποτίμημα (the latter intended chiefly to secure trust property and dowry claims). In Athens and in the

Ionian Islands there were often placed upon estates the so-called *ῥποι*, which served not only as boundary stones but often as pledge stones. The inscriptions on the stone recorded the fact of pledge and the restricted rights of disposal resulting therefrom. Meriting special notice because they anticipate important provisions of modern law are the objects protected against pledge by the Greek lawgivers for social reasons: a creditor could not take arms, a plow or other possessions which the debtor needed for a living. In the law of obligations the creditor originally possessed the right to seize the person of the surety, which was forfeited like a pledged security. Only at a later date was the creditor's right of self-help replaced by the judicial condemnation of the surety to make good the loss. Credit transactions were often held to be not actionable or to become actionable only upon the giving of a deposit. Freedom of contract existed in Athens. As far as is known most contracts were loan contracts; and chief among these was the marine loan, in which the fate of the claim was closely bound up with that of a given cargo in accordance with a special contract document (*συγγραφή*). Leases of labor were also important contracts. It is worth noting that linguistic usage did not differentiate between purchase and lease. Since purchase entailed liability for legal and physical defects, it was the seller's duty to make known any such defects (*προλέγειν*). Delictual forms of private action were strongly developed. Indeed a general form of action for damages was recognized. The concept of deliberate and capricious injustice to one's equals by artifice or affront was of importance and is still of general historical significance, since it involves the general protection of personality. It should be noted that a perjured witness was also liable at civil law.

Marriages were interdicted only in the ascending and descending line but not in collateral lines; thus the marriage of brothers and sisters was allowed. Vestiges of marriage by purchase are to be found in Homer. Monogamy had not yet become wholly accepted; on the contrary, a number of forms of sexual union were specifically recognized at law. When later the dowry (*πολξ*) was introduced it remained the property of the wife and was always secured by a lien upon the husband's property. As long as a woman remained unmarried, she was said to be under *κύριος*.

The law of inheritance provided for both testate and intestate succession. The law of intestate

succession gave preference to the children, who were followed by the more distant relatives. Only the children were liable for all the debts of the deceased; all other heirs only to the extent of their shares in the estate. But even in Plato the testament comes to the fore. According to Plato's not unchallenged authority (*Laws*, 922 E) the old lawgivers granted the right of disposing of property by will. Nevertheless, a number of intermediate forms in the evolution of the Greek law of inheritance may be clearly distinguished, such as a gift of an estate to take effect in the event of death, sometimes with a restriction as to the value of the property thus disposed of (for example, 100 staters in Gortyn). Another such intermediate form was adoption by will, by which the testator decided who was to be his son and heir. Where the only child of the family was a daughter, she might be given in marriage together with the estate; and legislation (enacted by Solon in Athens, by Epitadeus in Sparta) seems to have been required to make possible the choice of a husband for the heiress (*ἐπίκληρος*) among a wider circle than that of the relatives. The husband of the heiress became the adopted son of the testator, so that, strictly speaking, this was only another case of adoption by will. The device was used for the transfer of a family holding to the nearest agnate.

Greek criminal law was originally based upon the concept of vengeance. The famous trial scene depicted upon the shield of Achilles already indicates perhaps the substitution of compulsory composition for the unmitigated blood feud. Originally only the injured person or his kin might take action, but at a later date it became the rule—probably generally, certainly in Athens—that every citizen might prosecute offenders, an innovation introduced by Solon. This system of prosecution, however, was not based upon a division of wrongs into criminal and civil. Rather suits were regarded as either private (*δίκη*) or public (*γραφή*) depending upon whether the object was the redress of private wrong or the infliction of public punishment, but great freedom was maintained in the choice of the form of suit. Vestiges of the older system are represented by the provisions of the laws of Draco that prosecution for murder might be undertaken only by the relatives of the victim, but that if these were not forthcoming the phratry (a group of several families) might prosecute. The relatives as well as the dying victim had, however, a right of forgiveness. In view of this family solidarity in the criminal law it is

not surprising that such a consequence of a crime as *ἀτιμία* (disfranchisement) was visited not only upon the offender but also upon his children. A marked feature of the Greek criminal law in the age of democracy was the great variety of political offenses which might be committed not only by officials but by ordinary citizens. Greek law as the law of a people of great cultural achievement laid great emphasis upon the element of will in legal transactions. In the criminal law a distinction was made at a relatively early date between evil intent, negligence and accident. Among the penalties of Greek criminal law were death, loss of freedom by enslavement, which, however, was applied only to non-citizens, and last but not least fines, which were either fixed by statute or were in judicial discretion. On the other hand, neither mutilation nor penal imprisonment was ever resorted to. All Greek communities practised the confiscation of an offender's wealth for the benefit of the state. Only in a few cities, as in Lacedaemon, was whipping used as a punishment, especially for children and for slaves who could not pay a fine.

The Greek systems of judicial organization illustrate even better than the substantive law the close dependence of legal upon political forms. In the period of the oligarchy as in all the older stages of Greek constitutional history officials possessed judicial powers, at least in civil disputes. In many of the Greek oligarchic cities the council exercised criminal jurisdiction, especially in state trials. In Athens there was but one assembly with judicial powers down to the age of Solon. Under the democracy the pre-existing jurisdiction of the officials was considerably limited or abolished when Solon provided for appeal to the *Heliæa*, the judicial assembly of the people. Later the trial was had in the first instance before a special panel of the people, the *dicastery*, but notwithstanding the separation of judicial from other functions represented by this change of procedure the courts continued to be known as *heliastic courts*. In Athens every citizen above thirty years of age was eligible for service. Six thousand *dicasts*, chosen by lot from the applicants, were assigned by lot to the various tribunals. From the modern point of view the number of *dicasts* in the various panels was very large: there were at least 201 in civil suits and at least 501 in public suits. The tribunals were presided over by a non-voting official, called a *thesmothete*. Pericles instituted the payment of daily stipends to the *dicasts*. There was no legal recourse from the decisions of the popu-

lar courts; the sentence might be executed immediately after judgment was pronounced. There were similar popular courts in all the democratic states, but there were differences as to the judges' minimum age or the manner of their selection. In Athens despite the establishment of the *heliastic courts* judicial functions continued to be exercised by the *Areopagus* and the *ephetic courts*, which since very ancient times had had jurisdiction over crimes of homicide and several other offenses. Doubtless the sacred traditions which were associated with these courts prevented any attempt to disturb their jurisdiction.

The procedure in the *heliastic courts* was very similar in both criminal and civil cases, although as already noted a distinction was made between private complaints and public charges. A litigant could be represented by an orator. Thus representation by proxy was recognized, but there was no compulsion in this regard; a litigant could have his case prepared by an orator and deliver it himself. Procedure was oral and public. One peculiarity of procedure was the litigant's obligation to read aloud to the court the legal principles involved in his case. Thus the modern principle that a court takes judicial notice of legal provisions did not apply in ancient Greece. The *dicasts* were not bound by any rules of evidence. The oath, both as a litigant's and a witness' oath, was an important means of proof. Slaves testified under the application of torture. The procedure before the *Areopagus* manifested vestiges of very ancient forms even in historical times. There was also a special procedure in maritime cases as well as an abbreviated procedure for common criminals, who if caught in the act were immediately executed.

EGON WEISS

ROMAN. *See* ROMAN LAW.

HELLENISTIC AND GRECO-EGYPTIAN. Hellenistic law is the law which developed in the Hellenistic epoch, that period in the cultural history of the eastern Mediterranean world between the time of Alexander the Great and the conquest or acquisition of the area by Rome. Hellenistic law, a compound of Greek and oriental elements, did not perish when Rome absorbed the eastern Mediterranean world but continued to exist for centuries alongside the imperial Roman law. Inasmuch as the great majority of the extant sources of Hellenistic law derive from Egypt—despite its vast area the

Hellenistic world has bequeathed comparatively little in the way of legal sources to modern times—the present survey will deal almost entirely with that locale, and hence the coordinate title has been prefixed. Thus unless there is a special indication to the contrary, it is Greco-Egyptian law that is described.

The inscriptions of the mainland of Greece are of little value, because in these localities the oriental influence was slight; and the law of the Hellenistic epoch remained for the most part Greek. The native kingdoms of Asia Minor, on the other hand, were only superficially Hellenized. The Seleucid, Arsacid and Parthian empires have provided a few, but very significant, legal sources: excavations at Dura in Mesopotamia (refounded by Seleucus I as Europos) have recently unearthed documents in the Greek language written upon parchment; in Susa an inscription was discovered that deals with manumission; while in distant Avroman in Kurdistan two parchment texts penned in Greek illustrate Hellenistic penetration. Cuneiform documents of these monarchies likewise present Hellenistic legal concepts, notably the deeds of sale from Uruk in southern Mesopotamia. Pergamene inscriptions are valuable chiefly for the Roman period, while Syria is best represented by the Hellenistic portion (intestacy) of the Byzantine Syrian Roman Law Books of the Byzantine period (after the fifth century). On the south Mediterranean shore recent excavations by the Italians in Cyrenaica have revealed Hellenistic legal sources, particularly the constitution of Cyrene (308–06 B.C.) and the edicts of Augustus directed to this region (7–4 B.C.). Eclipsing all other sources, however, are the thousands of papyri of commercial, financial and legal content that have been found in Egypt. Supplementing the Greek papyri of Ptolemaic, Roman, Byzantine and even Arabic times are the demotic papyri of the Ptolemaic and Roman epochs and the Coptic papyri of the Byzantine and Arabic periods. Thus, for Egypt at least, for ten centuries (c. 300 B.C. to 700 A.D.) a relatively complete picture can be obtained of the interrelation of the Greek and oriental elements of the popular law.

No juristic commentaries or legal-philosophical writings are extant to reveal the theoretical jurisprudence of the peoples of the Hellenistic world. Law seems to have derived from legislation or customary law, Greek or local. Among the legislative sources were the *πολιτικοὶ νόμοι*, or city-state legislation, e.g. of Alexandria and Pergamum, and the various enactments of the

kings. The statute from Dura relating to intestacy (c. 280 B.C.), the revenue laws of Ptolemy Philadelphus (285–46 B.C.), the edict (*πρόσταγμα*) of Ptolemy Euergetes II fixing the jurisdiction of courts (118 B.C.) and Ptolemaic enactments upon civil procedure and slavery are among the important sources of the era of independence; and when the Roman emperor and provincial governors took over the position formerly occupied by the king, the legislative development of Hellenistic law was continued by such means as the edicts to the Cyrenaeans (7–4 B.C.), decrees upon the marital rights of soldiers (*Papyrus Cattaoui*, second century A.D.) or upon prescription (*Papyrus Strassburg*, no. 22, third century A.D.) as well as by administrative ordinances; e.g. the Gnomon of the Idios Logos.

Private law, however, is in the main to be extracted from documents. Of important legal consequence in the Greco-Egyptian system is the concept of documentation. A document might merely attest a transaction or in fact constitute the transaction; it might be phrased subjectively in the first person or objectively in the third person; but most significant is the distinction between private and official documents. The earliest private document, the *συγγραφοφύλαξ* contract (the Avroman parchment is of this type), is a six-witness instrument. More frequent is the *χειρόγραφον*, always subjectively phrased and without witnesses. The third type of private instrument is the *δπόμνημα*, or petition to an official. In Ptolemaic times the *ἐντευξις*, the personally delivered petition, was utilized to begin a trial, while the *δπόμνημα* was rather a supplemental request. The public documents included the state notarial deed, or document executed by the *ἀγορανόμος* (an administrative official), and the *συγχώρησις* instrument, executed by a judicial official of an Alexandrian court, setting forth the petitions of both parties to the transaction. Of semipublic nature was the instrument executed by a banker, the *διαγραφὴ τραπέζης*, because banking was in the main a state monopoly. The official registration of private documents (*δημόσιος χρηματισμός*) developed in Roman times, perhaps to discourage the *χειρόγραφον*, the purely private memorandum. Certain formulaic clauses also had vital legal effects. Thus the *καθάπερ ἐκ δίκης* clause would lead to summary execution, while various stipulations provided for penal damages and fiscal fines. Originally most documents were double, that is, with both an inner and an outer writing, but this practically disappeared in Egypt with

the Roman era although it persisted longer elsewhere. Seals were employed for subscriptions and attestations, lengthy descriptions of the parties were phrased in formulae and provision was made for the payment of a documentary tax. In Byzantine times documentation plays a lesser role and practically all deeds are of the Roman *tabellio* type, a practise which persisted in instruments written in the Coptic language.

In the law of persons juristic persons are occasionally encountered; in Ptolemaic and Roman times there is evidence merely of associations of individuals (*ἐταῖροι*) for the common welfare. In later times ecclesiastical corporations appear as the subjects or objects of legal rights. Natural persons were either slave or free, and the intermediate state of debtor slavery is perhaps evidenced by a Ptolemaic ordinance (*διάγραμμα*) on slave sale taxation and certainly is present in an antichresis deed (*παραμυγή*) from Dura. The birth registration of both the free born and slaves for tax and citizenship purposes is found as well as censuses at prescribed times. The slave was both man and *res* in the law and as the former was capable of owning property to a greater extent than in the Roman law. Slavery was terminated in Greco-Egyptian law by will; by sale to a god (this device was of Greek origin but rare); by manumission before a state notary granting freedom under the protection of heaven, earth and sun; by herald's proclamation when accompanied by payment of the *ἐγκυκλίων* tax; and, finally, by official order as a reward for denouncing criminals. A peculiarity of Greco-Egyptian law was that a part owner could partially manumit a slave, which was contrary to Roman law. The concept of citizenship before the *constitutio antoniniana* (partially preserved in a Giessen papyrus, 212 A.D.) is quite complex. Alexandria was a city-state and dissociated from the rest of Egypt, the *χώρα*. Accordingly special laws governed citizenship in that community even in Roman times, as is evidenced by the Gnomon of the Idios Logos, and the dispute between the pagan Alexandrians and the Jews resident there. In the *χώρα* besides the distinction pertaining to the citizens of Greek (or Macedonian) blood there was one also between the native Egyptians and the so-called *Πέρσαι τῆς ἐπιγονῆς*, whose exact character is in dispute: the theory generally accepted considers them descendants of foreign military colonists. A striking departure from Greek, Roman and Alexandrian law is to be noted in the Cyrenaean constitutional provision granting citizenship to

a person born to a Libyan mother and a Greek (Cyrenaean) father. It is practically universally held that the enactment of Caracalla (212) granting Roman citizenship to all free subject peoples possessed of sufficient property is presented by the Giessen papyrus, although there still exists controversy as to the character of the excepted *dediticians*. The Greco-Egyptian family law was distinguished by the role played therein by the *materfamilias*. Adoption was fairly frequent but its object was not *potestas* but rather the transmission of the adopter's property to the adopted child. In Byzantine times the *ἀποκήρυξις*, or exclusion of a child from the family, occurred as a disciplinary measure (it is also present in the Syrian Roman Law Books). In Ptolemaic marriage law there appears to be an interesting distinction between *ἐγγραφός* (written) and *ἄγραφος* (unwritten) marriage. The former was a full marriage; the latter, developed from ancient Egyptian law, was an inferior type, in which dowry and the marital property contract were absent. Besides the dowry there were given in later times *παράφερνα* (feminine furnishings), *ἔδνα* (*donatio propter nuptias*) and *ἀρραβών* (*arra sponsalicia*). Documents attest divorce and show that actual separation had already taken place. Special provisions regulate soldiers' marriages. Greco-Egyptian law knew but one type of guardianship for minors (*ἐπίτροπος*); the age of majority was probably twenty years. The general guardian of a woman (*κύριος*) was limited in his powers, and *tutores ad actum* were frequent. Very early in Roman times in Egypt women acted as guardians, particularly of their minor children.

The exact order of intestate succession in Greco-Egyptian law has not been ascertained, but it seems to have been ordinarily on the agnatic principle. The intestacy statute of Dura is based on a parental system somewhat similar to that of the Syrian Roman Law Books. Testate succession in Egypt can be roughly grouped into two types: by will, which was primarily Greek in origin, and by parental division, which was of Egyptian origin. Like ancient Greek law Greco-Egyptian law did not originally have universal succession, but it was instituted in Roman times. Minors might not make wills, and women only through their guardians. Clerics in Byzantine times had capacity to make wills and receive bequests, while the joint wills of spouses were frequent. No holographic will is known. The witnesses to a will did not need to know its contents, and revocation took place only if speci-

fied in the new will or if the old will was destroyed. The dispositions were of all types, including bequests of usufruct, substitute legacies and directions to satisfy obligations. The parental division might be by deed with immediate or *mortis causa* effect, revocable or irrevocable. A second type of parental division was the bilateral contract between the spouses to serve familial aims. If accomplished in the presence of the children, there was a binding disposition (*κατοχή*) to the children, irrevocable without their consent. If the children were not present, the division seems to have taken effect upon the death of either of the spouses. While these bilateral agreements were generally the marital contracts of the spouses, they were sometimes contained in the marital contracts of the children.

The law of obligations was almost entirely a law of contracts, for the field of torts was handled by minor officials in administrative proceedings. Hellenistic law clearly differentiated between movables and immovables in the contract of sale. Native Egyptian law, as evidenced by the demotic documents, employed two deeds in the sale of immovables: a "deed for silver" (*πρᾶσις*), setting forth the terms of the contract as well as the acknowledgment of payment by the purchaser, and a "conveyance" (*ἀποστασίον συγγραφή*) executed by the vendor. Similarly, Ptolemaic law utilized two deeds in these immovable cash sales (*ὠνή* and *ἀποστασίον συγγραφή*). In Roman times, however, there appeared the one-document sale (also illustrated by the Avroman parchment of 88 B.C.), combining the elements of the two deeds in a single *καταγραφή* or *παραχώρησις* instrument. Declaration of sale, receipt of price, assumption of risk and *βεβαίωσις*, or warranty against eviction, were formulated in various types of documents, which were subject to recording. Actual transfer was never necessary to complete the sale nor even *traditio per chartam*. Earnest money (*ἀρραβών*) was sometimes paid but was merely evidence of the obligatory force of the contract. In sales of movables a distinction was made between sale of slaves and of other objects. The former approached the sale of immovables; the latter did not need to undergo *δημοσίωσις*; that is, it was not made public. Sale of futures, such as future crops, is met with but is generally in the form of a loan of money repayable in grain; the latter was still the practise among the Copts in Arabic times. As contrasted with sale, lease was relatively informal; the terms were usually set forth in a

petition (*ὑπόμνημα*) to the lessor and the lease was generally not made public. Other types of *locatio conductio* agreements included apprentice contracts, work contracts, generally for skilled labor, and land or river transport (freight) agreements (compare the Medamoud inscription dealing with women as wholesale shippers). Loans were common; they were often secured by pledges and were generally with interest, which, however, could not exceed the amount of the capital. Sometimes repayment in services replaced that in money (*antichresis*). A maritime loan, in which a portion of the profits accrued to the lender, is remarkable in that it was without interest. In personal suretyship the suretor (*ἐγγυος*) in contrast to Greek law was normally an accessory debtor; but where he had simply guaranteed to produce a person, the suretor merely promised that the latter would appear. There was a clear distinction between personal liability and property liability. The pledge of movable things (*ἐνέχυρον*) was rare in Greco-Egyptian law, but the mortgage of real property, of which there were three types, was very common. The sale secured by mortgage (*ὠνή ἐν πλοτει*) was really a fiduciary alienation in which the debtor had possession and use, the creditor ownership of the property; but although evidenced by a Dura deed it was far less important than the more complex hypothec and hypallagma. These were not really mortgages in the modern sense, since the idea behind both of them was ultimate substitution of the property for the debt; that is to say, if the debtor did not pay, the property vested in the creditor irrespective of its value. It was, however, usually provided that in the event of the partial or complete destruction of the property there should be a right of personal execution against the debtor. The hypallagma, of Egyptian rather than Greek origin, differs in practise from the hypothec only with respect to the right to the so-called summary execution. The presence of an executive clause (*καθάπερ ἐκ δίκης*) in a loan contract resulted in personal and property execution as though a judgment had been rendered. Yet it did not give rise to pure self-help, for the debtor, after the creditor had recorded his petition (*ὑπόμνημα*), might answer by *ἀντίρρησις*, in which case normal litigation followed. Where a debtor did not answer, two courses were open to the creditor depending upon whether the creditor held a contract with executive clause without security or secured by hypallagma or a contract secured by hypothec. In the first case,

where the debtor had been notified of the recording of the petition and had failed to answer, the officials charged with execution were authorized to seize the pledged property (*κατοχή*), for which, as soon as its seizure was entered in the land register, a notarial document of conveyance (*καταγραφή*) was executed; a final series of operations involving various petitions and notifications put the creditor into actual possession. In the case of hypothec the procedure was greatly simplified. Finally, it should be noted that oaths were sometimes employed to found obligations and that there was direct agency, as is attested by numerous powers of attorney.

Apart from the topics of state domains and recording only a fragmentary picture of the law of property is presented. One papyrus presents a collection of materials on prescription; the Alexandrian municipal law contains provisions on the rights of adjoining landowners, boundaries and coownership; and there is also some material extant on easements. Byzantine times saw a development of the long term inheritable lease (*emphyteusis*). The doctrines relating to state domains, particularly in Ptolemaic times, deserve particular examination. As early as the third century B.C. the government granted land to Greek settlers (*κάτοικοι*) or to allotment holders (*κληροῦχοι*). Originally there were two types of *κλήρος* grants: temporary, terminating when the grantee was withdrawn from military service, and perpetual, that is, for life. In addition the cleruch received the *σταθμός*, or soldier's quarters, which in later times could be alienated. Toward the end of the Ptolemaic era the land of the cleruchs, now identifiable with the *κάτοικοι*, could be inherited and then alienated by means of a fictive loan; finally in Roman times it could be alienated under the supervision of designated officials. The military officers in Ptolemaic times received imperial land as *δωρεά*, which could be let out to king's peasants, individual lessees or even cleruchs. Temple land also belonged to the king; in early times it was dedicated to the gods, but later the ecclesiastical authorities had to pay a fixed rental for such estates, which were held in perpetuity. Imperial lands continued in the Roman era but were in great part replaced in late Byzantine times by large landholdings of private persons and the church, which were worked by means of the institution of the colonate.

The recording of transfers of interests in real property and of the sales of slaves has already been mentioned. According to a recent but

generally accepted view the private documents of sale together with affidavits were sent to the record office, which thereupon examined the land register. If it found the title of the vendor clear, the record office dispatched a notice to the public official charged with the execution of official documents (the *ἀγορανόμος*), who thereupon issued a public document of sale (*καταγραφή*), which the record office when notified in turn entered in the land register. Special legislation sometimes provided that notices of ownership be sent to the record office by all landowners. The land register itself was made up of a geographical list as well as personal folios. Survey rolls of all the owners of the district, in alphabetical order, were known as the *διασπρώματα*. It was thought formerly that entry therein constituted priority of claim, but now it is held that it controlled the acquisition and possession of taxable objects and that priority of title depended upon the *καταγραφή* itself. The land registry system played a very important role until the end of the third century.

With the exception of Cyrene little is known of the law of civil procedure outside of Egypt. There, however, three periods of development may be clearly distinguished: the procedure of Ptolemaic times, the *cognitio* procedure of Roman times and the libellary procedure of the Byzantine epoch. A Ptolemaic civil procedure ordinance regulated the course of trial, but to what extent is not exactly known. Recently there has been discovered a demotic civil procedure ordinance containing provisions on the efficacy of documents and oaths in the trial. The Ptolemaic court organization is better known, although as far as Alexandria is concerned little more than the names of the courts survive. There were the courts of the *χρηματισται* and *λαοκριται* as well as the third and early second century *κοινοδίκιον* and ten-men courts. In 118 B.C. Ptolemy Euergetes II enacted legislation providing that trials between Greeks were to be held before the *χρηματισται* and those between Egyptians before the *λαοκριται*; where the nationality was diverse, the language of the document upon which the suit was based was to be decisive. In addition to these courts a number of officials (e.g. *στρατηγός*, *ἐπιστάτης*) acted in a judicial capacity in administrative and criminal matters. There were also tribunals with special jurisdiction. Civil litigation was instituted by a petition (*ἐντευξίς*) to the king, either personally delivered to him or directed to him through the strategus or through the *χρηματισται* court. In

the first case a king's court might decide or delegate to the strategus or *χρηματισταὶ* court. In actual practise, however, very few petitions ever reached the king. Complaints were presented to the *χρηματισταὶ* by recording in the court's register or by marginal notation upon the complaints when originally sent to the king. The *λαοκριταὶ* (and sometimes during its existence the *κοινοδίκιον*) court received the case when the strategus after preliminary examination so decided or when the plaintiff directly presented it to them. The ten-men court and the Alexandrian *δικαστήριον* entertained trials where a private oral summons attested by two witnesses was read before them together with the complaint. In addition to the *ἐντευξις* there existed a petition (*ὑπόμνημα*) to the strategus for administrative cases and a notification to the same official for criminal cases. Summons was public, semipublic or private; and in the issuance of the first, which was the most common, the mysterious *πράκτωρ ξενικῶν* (also an execution officer) figured. Of the trials in the various courts little is known: oaths played a great part in the *λαοκριταὶ* tribunal; execution was regulated by the procedural *διάγραμμα* and was either personal or real. In addition to the executive clause in certain contracts which led to summary execution there were other types of clauses. While the so-called *cognitio* procedure, which developed out of the Ptolemaic, prevailed in Egypt in Roman times, the formulary procedure was in use among the senatorial provinces of the eastern Mediterranean. In the course of time it became more and more a pure state procedure. The new element in court organization in Egypt was the system of circuit courts, which lasted until Diocletian. The highest judicial official was the *praefectus Aegypti*, the head of the normal judicial system. In addition there were the *ἀρχιδικαστής*, who acted as the middle instance between the strategus and prefect; the strategus, with police and administrative competence and in charge of cases of voluntary jurisdiction; and, finally, the *juridicus Alexandriae* with special competence in the city of Alexandria. The petitions to the strategus and the other minor peace officials did not in the main lead to judicial litigation but were intended to enable the petitioner to retain certain rights or secure certain forms of official intervention. Judicial process was introduced either by a private summons, obligating the defendant to appear before a particular term of the circuit court, or by a petition personally delivered to the prefect; in this case

the latter notified the subordinate, who was to subdelegate the case or handle it himself. Normally the trial was before a judge delegate (*judex pedaneus*) who received instructions, not a formula, from the prefect. The judgment was not the Roman money condemnation; and both real and personal execution, the former specific (not like the Roman *missio in bona*), were handled by the *πράκτωρ ξενικῶν*. In other respects also much of the Ptolemaic procedure was retained in the Roman epoch. After Diocletian there was less delegation, more settlements (*διαλύσεις*) were made and the libellary procedure became the normal method. After extrajudicial demands upon the defendant had been made, the plaintiff addressed a *libellus* (*βιβλίον*) to the office of the *praeses* (governor). After an examination of the complaint an *executor negotii* (public defender) was assigned to the defendant to answer (submit an *ἀντίρρησης*) or deny the cause of action. The later course of the proceedings reflected practises of the Roman epoch. In Byzantine times also there is found the *episcopalis audientia* as well as the administrative tribunal of the *defensor civitatis* (*ἐκδικος*), who now replaces the strategus as addressee of petitions. Coptic documents of late Byzantine and Arabic times show an increase in the number of arbitrations and settlements.

The Cyrenaean inscriptions are the most important non-Egyptian sources of criminal law. A Laconian inscription dealing with treason and a criminal action for violation of sepulchres in a Nazareth inscription are also significant. Culpable, malicious acts (*ἀμαρτήματα*) and non-malicious acts (*ἀγνοήματα*) were the two classes of crimes in Ptolemaic law; the view that crimes were classified into private, tax, imperial public and sacral crimes is now rejected. Murder (*φόνος*) was malicious or negligent; personal injury (*ὑβρις*) led to a criminal action; the Alexandrian law of personal injury differed from that of the rest of Egypt. Certain acts of public violence (*βία*) and intentional extortion by officials (*διασεισμός*) were crimes. Theft, injury to property, whether malicious or negligent, particular frauds and the giving of false testimony conclude the list of private crimes. Illegally evading taxation was criminal, crimes against regal monopolies and domains were punished, and violating an asylum was a sacral crime. Single officials and certain courts such as the *χρηματισταὶ* had criminal competence. Private crimes were subject to police or court procedure; special trials were provided for the rest. Death

and imprisonment were relatively infrequent; fines and confiscation were the usual penalties. Under the Roman regime there was apparently no decided change. More categories were added to the crime of physical violence, with public whipping as the penalty. Pederasty and incest were considered crimes against the communal interest. The circuit court of the prefect had judicial power, while various minor officials exercised police jurisdiction. Whipping and condemnation to the mines were added to the punishments previously existing. The Byzantine epoch more clearly separated private and public crimes, but there was little change in the substantive law. The falsification of weights and the clipping of coins were important fiscal crimes, while in early times Christianity and later heresy constituted public crimes. The separation of civil and military authority led to two criminal processes; bail and rescript procedure were novelties in the former. Punishment depended on the status of the accused, whether he was of the lower (*humilior*) or the upper (*honestior*) classes of society.

A. ARTHUR SCHILLER

GERMANIC. Germanic law is the law not of modern Germany but of the Germanic peoples, that is, of the tribes called Germans or Teutons because of their language and origin. Although they belong to the Indo-European family of races, an admixture of stocks had taken place among them. When they first appeared on the stage of history they were divided into a large number of tribes; only by means of comparative research has it been possible to obtain an idea of "primitive Teutonic law." But it is no more possible to establish the existence of a primal Aryan law than of a primal Aryan race or language.

The custom of classifying races according to their languages and of denoting their relationship according to that of their languages leads to fundamental misconception, since the racial affiliations of a people often disagree with those of its language; and it is equally misleading to draw conclusions as to the kinship between the laws of two peoples from their linguistic relationship, for language families do not always coincide with jurisprudential groups. Ficker has investigated this point in the history of Germanic law. In general the antiquity of Germanic law is a great aid to the investigator; the law of the Germanic peoples is as fundamental to comparative law as is Sanskrit to comparative philology.

The principal Germanic tribes were the North Germans, or Scandinavians (Norwegians, Swedes and Danes), the East Germans (Goths and Burgundians) and the West and South Germans (Germans, Frisians, Lombards, Angles and Saxons). All their legal records date from the period after their conversion to Christianity; there are only slight vestiges of a heathen, pre-Christian law. Conversely, some German legal concepts have been adopted in the law of the Christian church. Such institutions as are shown by comparative law to be common to all the Germans are found also in part among the ancient Romans and Greeks as well as among the Celts and Slavs. It must not be concluded, however, that borrowing, dependence or interrelationship is involved in each of these cases. It would be a mistake to look upon Germanic law or the legal concepts common to all the Germans as specifically Germanic. Germanic law has nevertheless a characteristic physiognomy of its own.

The basic principles of the Germanic legal order are peace and freedom. Peace must prevail in the great juridic community of the people as well as in the smaller special groups: in the various clans, among the bodies of retainers, kinship groups and guilds. The concept of peace leads to mutual aid and adaptation as a matter of course; mutual loyalty arises from the same concept. Even the relationship of domination, the *mund*, partakes more of the nature of protection than of force. In the Germanic state there was no right without a corresponding duty. The individual owed duties particularly to his equal associates, for as a rule it was not the individual who had a sole right but the majority or even the totality of each group. The future generations, the unborn, had equal rights also: gratitude and reverence accorded the ancestors involved care and consideration for those to come so that the chain of members of the clan stretched from the past into the future. The individual possessed rights solely as a part of the whole group.

This social nature of the law in turn automatically generated legal concepts which must be described as politico-economic. The farmstead must be the economic basis of a kinship group; hence the scope of the transient owner's rights was not fixed by his personal interests but by the needs of the farm. Thus the farm became, so to speak, the legal subject. This explains why in many cases the customary law often provided that the ablest rather than the oldest should inherit. When the Germans first appeared, the

economic implications of their legal system were wholly those of a peasant and shepherd people. The "romanticism of sloth" and the savage barbarism of the Germans are both fables. Dopsch's researches emphasized and more recent prehistoric investigations and excavations have proved that wherever the Germans came in contact with Roman civilization they did not destroy it but continued it, amalgamating it with their own. The catastrophe theory has no longer any basis in fact.

Unlike Roman or modern law Germanic law does not contain the distinction between *jus publicum* and *jus privatum* which is so much a matter of course today. But this distinction, which cannot be maintained everywhere with strict rigidity in present day society, could far less have been maintained in a society which always kept in mind the whole, whose view of things was from the standpoint of the entire community and for which all law was a unity.

The cooperative structure of the clan is clearly exhibited in family law. The paterfamilias exercised a certain protective power over his wife and children and over the other kindred living under his roof. But the inclusive tutelage of the clan set limits to the exercise of his power. The position of woman as wife and mother was one of dignity. Many scholars enlarge upon wife purchase and conclude that the bride was an object of barter; but it is more correct to differentiate wife purchase from the capture and seizure of brides as a contractually concluded marriage, in which the bridegroom is obliged to compensate the previous guardian of the woman for the transfer of guardianship. Besides full marriage there was also a freer *Friedelehe*, based solely upon the agreement of both partners in the marriage. Under this form of marriage the wife did not come under the *munt* of the husband. Matriarchal law never existed among the Germans, nor can it be deduced from the passages always cited from Tacitus.

A characteristic of the Germanic law of things is the strict distinction between movable and immovable property, between chattel goods and land. Whereas the goods and chattels, usually movable and transitory, merely served the temporary needs of individuals, the real property was to serve as the permanent basis of existence for generations or for cooperatively associated communities of various types. Moreover all the landed property belonged to the people; it was the national territory. It was thus but natural that the legal transfer of landed property should

be subject to all sorts of conditions and careful limitations. This was all the more necessary since public rights of various sorts were often bound up with land tenure. The difference in the legal treatment of landed property and of chattels is exhibited both in the transfer of possession and ownership and in the protection of possession. While a symbolical livery of seizure was possible in the case of lands, an actual physical transfer was necessary in the case of chattels. A voluntary relinquishment of possession destroyed the seisin of a chattel. A third party who in good faith acquired possession of a thing which had been entrusted by the owner to another was protected against the owner. This rule was recognized because of the supervening interests of society.

In primitive times caste or rank groupings among the Teutons were rather simple, as the large mass of the people consisted of freemen, who, as the only fully qualified citizens, formed the nation. As a result of the need for symbols in the ancient law the freeman wore physical marks of distinction (as, for example, long hair) and bore the customary weapons as an outward symbol of his full rights wherever he acted as a free man, as in all meetings and legal transactions. The original Germanic nobility was a nobility of birth, which as such possessed no privileges. But its relationship to the gods endowed it with higher value and hence entitled it to higher wergild in case of killing as well as to greater credibility. Constitutional evolution led to a differentiation of rank; between the fully qualified common freemen and the unfree, who had no rights at all, arose intermediate classes of half freemen enjoying different rights. Moreover there appeared a new nobility by virtue of profession and office, while the ancient nobility died out. Social rise and fall and all the shifts in rank were occasioned to no inconsiderable degree by the change of economic conditions as well as by the system of feudal tenure with its distinctions of rank. Liberty, in the Germanic sense of the term, did not mean independence and freedom from obligations: it was chiefly manifested in obligations. The obligations of military service and of judicial service were the greatest rights of a freeman; the protection of the law and of the state were among his duties. In later times the concept of freedom was linked with the idea of a special legal position and with freedom from certain economic burdens or taxes.

In the Germanic state sovereign power was vested in the people united in the popular as-

sembly; at the beginning there were no rulers even in those states which had kings. The ancient Germanic king merely maintained peace and led the army in battle, but he was held responsible for defeat in war as well as for crop failures. Only at a later date, particularly in the Frankish empire, did the absolute monarchy develop, with its rights of lawgiving, hereditary succession and divisibility of power.

Germanic criminal law is characterized especially by the clear conception that the legal order is a system of peace. Crime is an act which breaks the peace; hence the natural consequence is the offender's loss of freedom and the cessation of peaceful protection of his person and property. He who breaks the peace is "without peace"; he is abandoned to the feud and the vengeance of the injured party. It follows from the concept of cooperative association, which permeates all of Germanic law, that the clan had to aid the injured party in pursuing the evildoer. Likewise, the offender's clan had to grant him protection unless it cast him out of its ranks. Warfare between the clans was ended by expiation, the payment of a fine and wergild and by solemn proclamation of the new state of peace. Grave offenses which involved breaking the peace of the whole people made the offender an absolute outlaw. "One without peace" could be hunted and killed like any beast of prey; he was called a "wolf" (*vargr* in Old Norse) and the forest was his refuge. Shameful offenses which provoked the ire of the gods were punished by death; it was proper for offenders in such cases to be sacrificed. The subsequent evolution of criminal law led to modifications of outlawry; an entire system of particular penalties evolved. Furthermore private criminal law, as manifested in the feud and in vengeance, was displaced and supplanted by public criminal law after centuries of conflict between the two systems. Finally, a long road had to be traveled before the primitive concept of responsibility for external consequences and the sole distinction between a deliberate act and an accident—*viliaverk* and *vathaverk* in Old Norse—were further differentiated and the concepts of attempt, complicity, negligence and the like developed. In ancient times, for example, the offenses committed by women or servants were considered unpremeditated accidental actions like anything "caused by a rooster's spur or a dog's tooth."

Germanic legal procedure is a conflict of parties, a proceeding between opponents. Only if they cannot agree upon the various steps in the

procedure (for example, as to means of proof) do they call upon the court for a determination. It is the duty of every member of the legal community to defend a charge. Thus Germanic legal procedure is governed by the principles of party presentation of defense, and particularly of orality, publicity and strict formality. Legal procedure as well as execution and distraint was in the hands of the contending parties. The clan was also obligated to aid in legal disputes, especially by providing oath helpers; for the contending party's oath had to be reinforced by the testimony of a number of witnesses who were required to swear that it was clean. Every trial might finally end in a duel. In heathen times the oracle was used as evidence in certain circumstances, while Christianity introduced trial by ordeal. At bottom this was a question directed to the Omniscient after all other sources of knowledge had failed. The principle that "where there is no complainant, there can be no judge" was annulled in the Carolingian period by the establishment of the inquisitorial procedure. The judge began to take charge of the conduct of the trial as well as of execution of sentence. Trial procedure underwent really profound changes when the principles of Roman and canon law procedure, the latter based to a large degree upon the former, were adopted. But the vitality and capacity for development of Germanic legal concepts are proved by the fact that the modern trial by jury arose from Germanic roots.

In the Germanic laws there are written, oral and objective legal monuments: legal sources, legal language and objects of legal significance. The written records are either records of the laws or documents and formulae, depending upon whether they set up a theoretical principle of law or apply the law to the individual case. The language of the law is instructive and interesting not only in connection with the investigation into the evolution of technical legal expressions but because it is contained in formulae and proverbs. Many of the ancient legal sources are in metric form or even in rhyme; Sievers called them "verses of the law." The objects of significance in legal affairs, such as legal symbols, personal emblems, coats of arms, instruments of punishment and court buildings, are a fruitful field for legal archaeology.

At the beginning Germanic law had no writings; it depended upon oral tradition. Its custody and true enunciation were the duty of the "law speaker" (in Swedish *laghma ther*). In the period of written records the law was preserved

in the impressive poetic form already mentioned. Even then, however, the unwritten customary law applied alongside the enacted law. The law handed down from the Germanic forefathers, in close agreement with custom and beliefs, was looked upon as immutable despite the fact that the community often made decisions which codified and changed the law.

The folk character of the law is manifested not only in its close connection with the rest of popular tradition but in the sensuous element prominent in it. In addition to the vigorous, plastic language legal acts were marked by vividness and by a wealth of formulae, symbols and gestures. This made all legal actions audible and visible, thus insuring legal transactions even without writing.

The oldest surviving Germanic law—preserved only in part—is the code of the Visigothic king Eurich, dating from the latter half of the fifth century. Its influence was felt far beyond its place of origin, since it was used by many other Germanic lawgivers; it may be traced through Salic, Bavarian, Burgundian and Lombard law. Among later Visigothic laws there is the *Lex romana Visigothorum*, which applied to the Romans of the Visigothic kingdom and was based upon Roman law. Then there is the *Lex Visigothorum*, which was intended for all the subjects of the Visigothic kings and which has come down to the present in several versions dating from the seventh and eighth centuries.

Chief among the laws of the Frankish rulers because of its age and its importance is the *Lex salica*, the law of the Salian Franks. It dates from about the beginning of the sixth century but was subsequently considerably enlarged. Laws of other German tribes under Frankish rule correspond to it: *Lex ribuaria*, *Lex Francorum Chamavorum*, *Lex Thuringorum* (*Angliorum et Werinorum*), *Lex Bavariorum*, *Lex Alamanorum* and *Lex Saxonum*. The two High German codes are very closely related; the oldest code of Charlemagne for the Saxons shows the rigorous hand of the conqueror upon the subjugated tribes. The Lombard codes, which commenced with the Edict of Rothar of 643 and were continued by the later kings, Grimoald, Liutprand and their successors, are clearer and more comprehensive. In their language as well as in their form and content the Lombard laws show the influence of Italian culture and of Roman law. Only a few Germanic words are found in the Latin text of the Germanic laws mentioned above. The most important are the old Frankish

words in the *Lex salica*, the *Malberg Glosses*, which still leave many problems to be solved.

Compared with the continental, Anglo-Saxon laws have many advantages. In addition to their number and inclusiveness they afford much more direct insight into Germanic legal affairs from the sixth century because they were written in the native tongue. The Germanic tribes who emigrated to Britain—the Angles, Saxons and Jutes—finally merged into one people, and their law, which also shows traces of North Germanic influence, became amalgamated also. When the Normans conquered the island they brought with them a new law, West Frankish rather than North German in character. The oldest Anglo-Saxon laws date from the period of the independent kingdoms of Kent (beginning with King Aethelberht) and Wessex (King Ine), whereas the law of the Anglian king Offa of Mercia has not been preserved. After King Alfred founded his great kingdom he established a common law. Among subsequent lawgivers Athelstan, Ethelred and especially the great Canute deserve mention. The Anglo-Scandinavians at first had their own law, whose name was applied to the region settled by them: Denalagu.

Among the German tribes the North Germans excelled in the art of legislation. Although those of their law books which are extant are much younger than those of the South Germans cited above—none of them is older than the twelfth century—they surpass their southern parallels in purity, originality and antiquity as well as in number and scope. Like the Anglo-Saxon legal records they employ the native tongue. Most of them are the work of private individuals, i.e. law books in the proper sense of the term, but they are the “written record of an ancient and officially administered tradition,” the *lagsaga*, the speaking of the law. There are four Norwegian regional laws: *Eidsifathingsbók*, *Gulathingsbók*, *Frostuthingsbók* and *Borgarthingsbók*; a large number of Swedish laws; the *Westgöotalag* is the oldest, the *Östgöotalag* the most extensive, and there is also the law book for the island of Gotland—the *Gutalag*—as well as many others; and, finally, a number of Danish legal antiquities, which are similar in character to the German law books of the thirteenth century. On the island of Iceland, where the course of Germanic settlement may be traced from its very beginnings (about 870) and where the state arose out of the temple associations of the gods, a number of legal antiquities developed from the *lögsaga*. But neither the first Icelandic

code, the *Úlfjótsslóð* (930), nor the *Haflidaskrá* (dating from the winter of 1117–18) is extant; there exist merely collations dating from the thirteenth century, the so-called *Grágás*. The *Þarnstíða* and the so-called *Þónsbók* (1281), which has remained in force down to the present day, are of later date.

During the Frankish period the number of legal sources was still limited. This state of affairs changed with the advent of the (German) Middle Ages. Tribal laws were superseded; special regional and local laws arose everywhere; imperial laws, such as the public peace laws (*Landfrieden*) of Mainz of 1235 and the Golden Bull of 1356, are rare. The rise of city laws and of rural village laws is of importance; several thousand examples of each of these have been preserved. The city laws—interrelated and thus classifiable in family groups—owe their origin and development to the flourishing markets and trade and to the development of separate urban communities. The rural laws, or *Weistümer* (annual declarations of official usages made by the elders in the village assemblies), deal principally with the laws of landownership in the village, with the mark association and relationships between neighbors. Both urban law and *Weistum* are partly authoritative in origin and partly independent. As a rule the *Weistum* is marked by a more naïve form and an older content; often it is comparable and in many ways related to other types of folk poetry, the saga and the fairy tale. But the difference between urban and rural conditions at that time was not too great to permit of the application of urban law to rural communities also, both in the east and in the west. There developed moreover sovereign territorial and local laws, among the latter the Frisian codes, famous as gems of Germanic legal poetry, and the Swiss. The private law books of the thirteenth century, the *Sachsenspiegel*, the *Schwabenspiegel* and the like, enjoyed extraordinary repute and wide application. The *Sachsenspiegel* was applied in part down to 1900. Some of the French legal sources, especially the so-called *coutumes*, may also be considered Germanic in origin.

In its subsequent development Germanic law, which was often a mixed product even in its origin, adapted itself to cultural changes, legal needs and economic advances, but it was influenced also by foreign laws. The chief foreign influences were the Roman and the canon law and in much lesser degree Celtic, Slavic and Jewish law. Roman law influenced German law at the

time of the great migrations and during the rule of the Franks, but its influence was even more profound during the period of its scientific reception in Germany; that is, during the fourteenth and fifteenth centuries. In fact when the regulations of the imperial court of justice (*Reichskammergericht*) in 1495 prescribed the application of Roman law by the judges, the domination of foreign law in Germany resulted; native law was forced into the background. Often enough German legal concepts were expressed in a Roman form because the latter was held to be the only possible one. Only gradually and only after the seventeenth century did a German science of law evolve; despite its alliance with natural law it did not succeed in winning its way during the great works of codification of the eighteenth century. The nineteenth century brought with it a new wave of reception, against which Gierke and others strove valiantly, but by no means wholly successfully, during the drafting of the Imperial German Civil Code of 1900 (*Bürgerliches Gesetzbuch für das deutsche Reich*). But in the twentieth century much of the old legal material has been reawakened to new life, especially through the social concepts of agrarian law, the law of association and the like.

Not only was Germanic law subjected to outside influence and the reception of foreign law; the process has been reversed, and it has itself penetrated abroad, in turn influencing foreign law in a surprising manner. First of all, it is known that vestiges of Visigothic law can be found in Spanish and Portuguese law, and not merely in the old *fueros*. Lombard legal concepts are still alive in Italian law. With the expansion of the English world Anglo-Saxon legal principles have covered the earth. French law (Frankish and Norman) penetrated to lower Italy and Sicily as well as to Greece and to the crusaders' states of the Near East during the eventful history of the Mediterranean basin. Likewise German law accompanied East German colonization in the rise of the Hanseatic League throughout the Baltic. The German, whether merchant, artisan, knight or peasant, took his law with him; and in foreign countries the natives often adopted it, as was the case with the Czechs, Poles, Russians, Ukrainians, Magyars and others. The past few years have seen the deliberate adoption of German codes in the Far East, especially in Japan and China. The wholly Germanic Swiss Civil Code has recently been adopted by modern Turkey.

EBERHARD VON KÜNSSBERG

SLAVIC. The original home of the Slavs was probably in Polesia or on the plains to the east of Polesia. The laws by which they were governed were the proto-Slavic laws, out of which all the laws of the Slavic nations later developed. Since no direct documents of proto-Slavic law survive, it can be reconstructed only on the basis of a comparison of the legal institutions of the later Slavic peoples. The Slavs left their early home in the second or third century A.D.; about the sixth century those who had migrated westward had reached the Elbe and the Bohmerwald: they were the so-called western Slavs. The second branch, the eastern Slavs, who had gone southward, had reached the Balkan Peninsula, the Aegean Sea and the Adriatic. The writings of western European, Greek and Arabic writers dating from this period offer some indications as to the structure of the Slavic law.

Although the Slavic tribes had already become differentiated, they had not yet formed larger national groups. Under the pressure of the German Empire, the Slavic tribes farthest to the west became slowly Germanized. Those situated between the Elbe and the Oder were thus unable to create a larger organism. Little or nothing is known about the laws of these Slavs or of those included in what later became Austria. After the attempts at political organization of Samon (623-58) and the Great Moravian State (890-905), the Bohemian and Polish states were organized among the western Slavs in the tenth century. In the ninth century the Russian, Bulgarian and Croatian states had been formed. The Serbian state was finally established in the eleventh century. Two of these states owed their organization to foreign invaders—Russia to the Varegs and Bulgaria to the Bulgars.

In these six states law began to develop from proto-Slavic elements and long continued to evidence numerous analogies. But except in the one case of Russia this development was later interrupted when these states came under the rule of foreign governments which set aside the basically Slavic laws. The Croatian state endured for the shortest time, one part yielding to the pressure of Hungary at the end of the eleventh century, and another, Dalmatia, coming under the rule of the Hungarian king in 1420. Henceforth Croatia, joined in personal union with Hungary, preserved its legal distinctness only to a limited extent. Serbia had as early as 1394 admitted dependence upon the Turks, who in 1459 occupied the country and converted it into a Turkish province. Bulgaria lost its nation-

hood in 1396 and likewise became a part of the Turkish state. In 1526 Bohemia was joined with Austria in a personal union and finally after the battle of White Mountain in 1621 lost almost every vestige of independence, although for a while it was able to retain its own laws and courts. The partitions of Poland by Austria, Prussia and Russia in 1773, 1793 and 1795 respectively, ultimately led to the extinction of the native law. Only the Muscovite state managed to retain its political independence throughout the centuries and to impose its laws upon extensive territories.

Elements of Slavic law are to be sought also in the non-Slavic nations which took over the legal institutions of their Slavic populations. This was the case in Hungary, in Moldavia and Wallachia, and in Lithuania; the latter in the fourteenth and fifteenth centuries occupied considerable stretches of Russian territory, and later united with Poland, taking over a number of Polish legal institutions including some in the sphere of court procedure. There are many Russian and Polish elements in the so-called Lithuanian Statutes of 1529, 1566 and 1588.

On the other hand, even during their independence the laws of the Slavic states were subject to the influence of foreign laws. The legal institutions of the Frankish state, the first in western Europe to form a political organization, exerted a profound effect upon the political laws of Poland and Bohemia. A considerable influence, especially on the personal marriage code, was wrought by Roman Catholic canon law and further, directly or indirectly through the canon law, by Roman law. Stronger still was the influence of the laws of the Italian cities on the town laws of Croatia. Roman-Byzantine law and the canon of the eastern Orthodox church were important in the development of legal institutions in Russia, Serbia and Bulgaria.

In all these countries legal relations were regulated almost exclusively by usage. This may be ascertained from the sources of older legal practise, from documents, or from registers of usage, the latter being particularly valuable in that they fix a previously created legal status, often going back to a much earlier epoch. Extensive and numerous registers of usage have been preserved, especially in Bohemia. The oldest, part of which dates from the thirteenth century, is usually called the Book of the Lord of Rosenberg; the author is unknown. The second register, the *Ordo iudicii terrae*, is in Latin, but it exists also in Czech as *Rád práva*

zemského; the latter version dates from the middle of the fourteenth century and is probably earlier than the Latin. About 1420 *Výklad na právo země české* was copied by Andrew of Dub. All these registers contain pure Czech laws and are free from foreign influences save for the Roman legal terminology in the Latin text of *Ordo iudicii terrae*. The last register of Czech laws and the most extensive was *O právech země české* (1508),¹ the work of Victor Cornelius of Věšhrd. It was systematically planned and comprised all branches of law.

Although as early as the thirteenth century the Bohemian monarchs had begun to consider the codification of the Bohemian law, the written form of the project did not appear until the reign of Charles IV (1346–55); entitled *Majestas carolina*, it contained 127 paragraphs, comprising the whole sphere of Bohemian law and showing some Roman law influences. As a result of the opposition of the nobility, however, this codification was not published, although it was known later and sometimes even applied. The first published Bohemian codification appeared in 1500 and is known as the Statute of King Vladislaus. It was republished and expanded in 1530, 1549 and 1564. The latest codification, the *Verneuerte Landesordnung* of 1627, included public law and civil law ordinances, the latter already very much under the influence of the Roman law which in Germany served in that period as the common law (*römisches Gemeinrecht*).

In the eighteenth century the Bohemian law was rapidly being eliminated. In 1707 Emperor Joseph I issued for all the Bohemian crownlands a criminal code based upon the sixteenth century ordination of lower Austria. In 1768 the Austrian criminal code (*Constitutio criminalis thesariana*), in 1781 the Austrian code of civil procedure and in 1811 the Austrian civil code (*Allgemeines bürgerliches Gesetzbuch*) were introduced into Bohemia. Thus the last vestiges of Bohemian court law were removed.

In addition to the documents which date from the twelfth century, the chief sources of the old customary law of Poland are the court records, which began to appear at the end of the fourteenth century. Unlike those of Bohemia, the most important of which were burned in Prague in 1541, the Polish court records were preserved with great care, and there are extant tens of thousands of volumes from the Middle Ages to the fall of the old Polish Commonwealth. The registers of the customary law in Poland were less extensive than in Bohemia. The oldest,

dating from the second half of the thirteenth century, originated in what is now Eastern Prussia, at that time occupied by the Teutonic Knights; it was written in German for the benefit of the cloister clerks who applied this law to the Polish population settled there. In addition there have been preserved several registers of fifteenth and sixteenth century court law from the various sections of Poland.

To a certain extent the Statutes of Casimir the Great constituted a codification of Polish law, chiefly the court law. This was not one law, but two: one each for the two chief sections, *Wielkopolska* (Greater Poland) and *Malopolska* (Lesser Poland). The statute for Greater Poland appears to be only a register of the old customary law, while the statute for Lesser Poland contains innovations and shows slight traces of Roman law. Both include decisions from all branches of court law, later supplemented in greater detail, as well as a collection of prejudicates, the work of a private hand. These component elements which made up the Statute of Casimir the Great were adopted in the course of the fifteenth century in other sections of the Polish state. While no codification of the court law of the entire state was ever effected, two projects were worked out (one, *Correctura iurum*, between 1532 and 1534; the second, prepared by Andrew Zamoyski between 1776 and 1778); only the judicial procedure was codified and published in 1523 as *Formula processus iudicarii*. The law was codified in two parts of Poland, Mazovia (*Mazowsze*) and Royal Prussia (Prusy królewskie). The extensive Mazovian codification was based chiefly on registers of the Mazovian customary law in 1532, published in a second, slightly altered version in 1540. In Royal Prussia the diet (Sejm) of 1598 published a code under the title *Correctura terrarum Prussiae*, which modified the laws there in force in the spirit of the Polish law. Mazovia, however, renounced its code, with the exception of a few ordinances, and acceded to the Polish law. The Statutes of Casimir the Great were supplemented by the Warta statute and by special regulations from the sphere of private and criminal law as contained in the statutes of the fifteenth century and subsequently in the laws passed by the diets from 1493 to 1793. In addition to the legislative ordinances the norms of the customary law possessed validity in the field of court law.

For Croatia, which was most subject to the influences of Italian legal culture, there are

early legal sources. While the oldest documents date from the end of the ninth century, Croatia had no major legal documents outside Dalmatia, where statutes markedly affected by Roman law were issued for certain districts, cities and villages.

In Serbia written sources for native law appeared much later, although there had long been in use Serbian translations of the monuments of the Eastern church law. As early as the end of the ninth century a collection of laws of the Greek church, entitled *Nomokanon*, was translated into Old Church Slavonic and copied in the middle of the ninth century by John the Scholastic, but the second part, which contained the regulations of the secular law, was omitted. This *Nomokanon* spread to Bulgaria, Serbia and Russia. In Serbia the entire later *Nomokanon* (of 1159 to 1169) was translated about 1219 together with the norms of the secular law; the latter were derived from the Novels of Justinian and Alexis Komenos and from the Eclogue of Leo, chiefly from the so-called *Procheiron* (Handbook of Roman law, published about 879 by Emperor Basil of Macedonia), which was known also among the Slavs as *Gradski zakon*. This translation reached Bulgaria and Russia. In the middle of the fourteenth century an arrangement of ecclesiastical law which contained many norms of secular law was translated into Serbian. While in the first half of the fourteenth century there was made a Serbian compilation of Byzantine law based especially on the so-called village laws as well as on the regulations of civil and criminal law. Such written sources of Serbian law as are available were of later origin. The only extensive monument of Serbian law, the codification of King Stephen Dušan, dates from the fourteenth century; it contains regulations from the whole field of court law and shows the influence of Roman-Byzantine law. While an overwhelming part of the regulations represents the Serbian customary law there are also new regulations, especially with regard to procedure. A revision of this code was undertaken at the beginning of the fifteenth century.

Little is known of the laws which were valid in Russia before the *Russkaya pravda*, for many centuries the most important written source of Russian law. Formerly regarded as a codification, it is now considered rather a register of customary law which utilized also a few of the shorter laws of the princes beginning with Jaroslav (ninth century). There are two distinct versions of the *Pravda*; the older version, con-

taining about fifty concise articles, was written in the twelfth or possibly even in the eleventh century; the second version is much more voluminous, for it includes almost all the articles of the first version, usually with revisions and alterations, as well as a number of new articles, especially in the field of court law. While the first version is confined for the most part to native Russian law, the second shows the effects of the eighth and ninth century Roman-Byzantine law, particularly of the Eclogues of Leo and Constantine, the *Procheiron*, and the *Epanagoge*, as well as an excerpt made from an eclogue under the spurious name of the Law of Constantine the Great. There are indicated also certain points of contact with Germanic law, probably the Norse laws of the Varegs. Moreover the second version profits from the decisions rendered later by the grand dukes, as well as from the court decisions.

Subsequent legal documents which are now characterized as law codes date from the fifteenth century. Of the *Sudnaya novgorodskaya gramota* (Novgorod codification), which dates from about the middle of the fifteenth century, only a fragment is extant. The extensive codification of the principality of Pskov (*Pskovskaya sudnaya gramota*) bears the date of 1397; this is probably an error, and the date should be altered to 1467, although the codification may include an earlier one from the fourteenth century. While it made use of earlier laws it was in the main based on the customary law. In 1497 Grand Duke Ivan Vassilyevich issued as a law for all Muscovy the so-called *Sudebnik* (68 paragraphs), which contained primarily rules of procedure, but also criminal and civil regulations. He drew from the Pskov codification and from the *Russkaya pravda* as well as from custom. The *Sudebnik* of 1550 was a revision and extension of the previous one and likewise dealt chiefly with procedure. Finally in 1648 a voluminous codification of Russian law was published by Czar Alexis Mikhailovich (*Ulozhenie Tsarya Alexeya Mikhailovicha*), which contained all branches of court law. This code did not contain pure Russian law; it was strongly influenced by Roman-Byzantine law. Numerous regulations are borrowed from the Third Lithuanian Statute, which in its turn had taken over to a large extent the regulations of Polish law. Attempts to codify the laws of Russia were renewed throughout the entire eighteenth century but were unsuccessful, and finally a systematic collection of Russian laws entitled *Zvod zakonov* was

published in 1832; French law exercised a strong influence on the private law section.

In their original homeland the custom of marriage was already established among the Slavs; reports of sexual communism do not deserve credence. Polygamy was permitted but was practised generally only by the wealthy. Marriage was contracted most frequently by purchase, although marriage by capture was known. Subsequently the relation of marriage was entered into by contract; purchase survived, however, until much later. Marriage was rendered valid by two legal acts. The first was the agreement between the clans to which the husband and wife belonged, and after the breakdown of the clan ties, between the man (or his father) and those to whom the woman was subject, for she had no voice in the transaction. Once the contract had been confirmed the second legal act took place; this was the surrender of the woman to the man in execution of the contract. The act of transfer contained three component parts: the chief act of giving the wife to the husband amidst wedding solemnity, the transportation to the husband's home, and the *pokładziny* (*depositio in torum cum viro*). This last, however, was not as important as among the Teutons. The negotiations were accompanied by various formalities and ceremonies of a symbolical character, traces of which are still to be found in Slavic folklore; they have been studied in connection with the history of Polish law, for several of them were significant in law. First there was the handshake of the partners to the union, which signified the confirmation of the contract. Another important convention was the exchange of the garlands which they wore as crowns, effected either by the bride and groom or by a go-between (later, under the influence of church laws, rings were exchanged instead of garlands); this custom of exchanging garlands held on for a long time, however, and even after the acceptance of Christianity it was adopted into the church ritual and was still practised in the sixteenth century. The bride drank a cup of water, probably as a sign of her agreement and as a witness against herself. As a pledge that the bride would remain subject to the new husband, the bridegroom was given the wedding twig, although the exchange of garlands seems to have superseded this ceremony. As a symbol of the bride's separation from the clan to which she belonged and of her liberation from its authority or, as others would have it, as a symbol of her adoption by her husband's clan, the hair

on her temples was cropped. The bride's head was covered with a veil or the bridegroom's cap was placed on her head; this latter custom, which prevailed in the eastern parts of Poland and was known also in Russia, constituted a sign of the assumption by the husband of power over his wife. The new couple partook of cheese and bread in common, and in all Slavic countries save Poland the bride untied her husband's shoes. And finally there was the wedding feast.

After the acceptance of Christianity the wedding contract was conceived, under the influence of the church law, as an engagement, and the transfer as a conclusion of the marriage. The southern Slavs took over the ecclesiastical wedding forms by accepting the principles of the Eastern Church. The western Slavs did not adopt immediately as a general custom the performance of wedding ceremonies in the presence of the clergy, for it was not then a requirement of the Roman church. In Poland, where the change came latest, marriage *in facie ecclesiae* was not established until the fourteenth century.

In the primitive Slavic law the wife was subject to the husband's authority; she left the clan to which she belonged and went over to her husband's. The original treatment of woman as property was expressed in the frequent burning, or killing by other means, of the widow, who was buried together with her husband as an object of personal property. Marital fidelity bound the wife, not the husband; and children by concubines were usually treated equally with the legitimate children. The husband possessed considerable freedom in dissolving marriage, traces of which persisted after the adoption of Christianity in Bohemia and Poland as late as the twelfth century. Polyandry as well as *snochactwo* (the cohabitation of the father with the wife of a minor son until the latter's majority) were in general exceptional and were common only in Russia, although they were encountered as late as the sixteenth century.

The marital property laws of the northern Slavs (Bohemian, Polish and Russian) showed great similarity throughout the entire mediaeval period, while the southern Slavs had early adopted the regulations of the Roman law. Among the northern Slavs the father or the nearest male relative gave the bride a dowry including personal articles and a sum of money. On the other hand, the husband guaranteed his wife a certain sum, confirmed by contract. From the sixteenth century these laws were modified.

The law of inheritance was developed fairly

late among the Slavs. As long as there was family community, there was no inheritance in the narrow sense, for the estate continued as the property of the members of the clan or family united into a community. On leaving the household a son received from his father a part of the estate, while losing his right to the rest of it. The father was not obliged to make such disposal, however, unless he remarried. The estate left behind by the father fell undivided to the sons, although originally the father was allowed to divide it among his sons in accordance with his own will. Later the sons received equal shares. A married daughter did not participate in the inheritance, but an unmarried daughter had the right to demand support and, if she married later, a dowry equal to that of a daughter married during her father's lifetime. Originally daughters could not inherit real estate even if there were no sons, for in such a case real property fell to the more distant male relatives. Later they acquired the right to inherit land, but only if it was not clan property. In Lesser Poland the Statute of Casimir the Great permitted daughters to inherit family goods if there were no sons; later this provision spread to other sections, but until the sixteenth century male relatives had the right to buy up such goods. After the mother's death the children, regardless of sex, had equal rights. Relatives in indirect line participated in the inheritance according to the degree of relationship. The right to bequeath property was developed under the influence of Roman and ecclesiastical law, for wills were originally unknown to Slavic law. In Poland inherited real estate was in principle inalienable.

Since Slavic law was necessarily agrarian in nature, it developed regulations concerning the ownership of land, but was defective in the development of the law of obligations, which appeared later as a result of the influence of Germanic and Roman laws. Property originally belonged to the entire clan. The southern Slavs carried out the principle of community ownership in the creation of the so-called *zadruga*, which comprised over twenty members, all of whom claimed descent from a common male ancestor. Land was owned and tilled in common, and its products were consumed in common. The *zadruga* was found among other Slavic peoples, the Czechs, Poles and Russians, but it was at its strongest in the south. While it had generally disappeared during the Middle Ages, it survived in Montenegro, Bosnia and Herzegovina until

the nineteenth century. Wherever the *zadruga* did not exist, ownership in common among the Slavs was combined with individual family holdings, perhaps reassigned every year, and separate living quarters and consumption. Although common ownership disappeared among these Slavs, vestiges remained in the *jus proximitatis*, which did not permit the clan lands to be alienated without agreement by the relatives; in case such alienation had taken place, the relatives could seize the land, originally without even indemnifying the new owner. This law remained in force in Poland until 1768.

When there came to be less and less unowned land, however, there began a strict delimitation of the boundaries of real property. Borders were fixed (in Poland as early as the fourteenth century) and marked by blazing or by mounds and stone barriers. The right of ownership, nevertheless, was not as exclusive as among the Romans. Especially on Russian territory the idea of service, as, for example, wood cutting, was highly developed. Not until the sixteenth century did these rights begin to be limited. While Roman property laws early reached the southern Slavs, the idea of clan ownership and *jus proximitatis* persisted for a long time.

A characteristic trait of the law of obligations among the northern Slavs was that the contract did not impose the duty of fulfilment until it had been specially confirmed. Originally the confirmation was probably by sacral sanction and later by oath. In the historical period a pledge, originally given by the relatives, was favored. Newer methods of confirmation were received from the west. Other contracts, such as those for security, rent and the like, were developed in a later period; although their forms were similar among the various Slavic peoples, they did not spring from a common source but had their genesis for the most part in the reception of foreign laws.

Criminal law is better known than other branches of Slavic law. The primitive institutions which developed among the proto-Slavs long remained in force. While it is known that among the early Slavs the right to punish within the clan lay with the clan authorities, the system of punishments is unknown. Especially in Polish law traces of this clan authority long remained in the right of the father to punish members of the family; until the fifteenth century the father was responsible also for the infractions of his children. In interclan relations the principle of self-help predominated. A wrong

whether "civil" or "criminal" called for revenge on the part of the person wronged. Retribution was not regulated by the strict principle of *lex talionis*, and the result often led to protracted conflicts. A wrong suffered by one member of a clan was looked upon as an offense against the whole clan, which thus sought revenge not necessarily against the wrongdoer alone but against the clan to which he belonged; often entire clans were exterminated in this manner. Attempts to limit such feuds were the fixing of fines, the restriction of revenge to the guilty person, the introduction of the obligation of warning the offender that vengeance would be sought, the prohibition of vengeance in certain cases and finally the encouragement of peaceful settlement and investigation in the courts.

The earlier version of *Russkaya pravda* insisted upon the right to avenge, but in the second there is no mention of it. In Bohemia vengeance figured in the monuments of the fourteenth century. In Poland individualized vengeance still occurred in the sixteenth century, and the law of 1588, which made punishable the declaration of intention to retaliate, still managed to leave the execution of the intention free from state punishment. In the customary law vengeance was retained up to the nineteenth century among the southern Slavs.

Instead of retaliation the clans often made an agreement of reconciliation; this was effected by mediators, who set the terms. Reconciliation consisted of "humiliation" and "ransom." Humiliation was a symbolical execution of retaliation: a person guilty of homicide went barefoot, clad only in a shirt and bearing a sword about his neck, to the nearest relative of the deceased, to whom he handed the sword, which the relative then brandished above the offender's head, thus indicating his right to deprive the guilty man of his life. "Humiliation" evidenced many sacral elements, which may be accounted for by the influence of ecclesiastical law, as in general among all nations where retaliation is practised. In addition to moral satisfaction, humiliation provided for material satisfaction in the form of articles or money, the amount depending upon the greatness of the inflicted injury; the sum paid in the case of homicide was known as "head payment." In each particular case the amount was fixed, but subsequently as society became differentiated, the payments were fixed by custom according to social position. In a later period the amount of the head fee was confirmed by registers of the

customary law or even by legislation, as in the Statutes of Casimir the Great. Humiliation was abandoned before ransom, which gradually became transformed into the damages of private law.

After the rise of state authority the state began to investigate certain offenses in its own name. In the beginning, however, the number of these offenses was small; they were offenses against the state, the military forces, the treasury, religion and public order. Other offenses were investigated only following an accusation of the injured party. In Poland especially this principle was strictly observed, and even in the case of homicide it remained until the partitions of the old Polish Commonwealth. Only after 1588 did the state intervene as a subsidiary when the relatives did not enter an accusation. The state extended the number of offenses to be investigated by the authorities; this was already noticeable particularly in the *Zakonnik Dušana* under the influence of Roman-Byzantine law, in Croatia and Bohemia under the influence of western European nations, and in Russia perhaps under Tartar influence; it was in Poland that the old elements were retained for the longest period. Survivals of retaliation are still to be found, however, in more recent times. The killing of a thief caught in the act was free from all punishment, according to Russian, Bohemian and Polish law. In Bohemia an attempt was made at the end of the twelfth century to remove this exception, whereas in Poland it survived to the end of the eighteenth century, but only in the case of a thief of grain caught and killed at night by the owner of the grain or by his people.

The criminal laws of the individual Slavic nations took over from the original Slavic law and gave still wider application to the principle of collective responsibility in offenses investigated by the state. This responsibility appears as the responsibility of a group of people linked by blood, as in the clan or family, or by territorial propinquity. Clan responsibility was retained longest in Poland; it was abolished by Casimir the Great, but such vestiges as the responsibility of children for the offenses of the father continued until the modern period—in cases of heresy, until the sixteenth century, of treason and lese majesty, until 1791.

The responsibility of territorial groups was characteristic of the mediaeval period throughout Slavdom. Such a group was constituted either by the *vicinia* (*okolica* in Serbia, *opole* in

Poland), which comprised a number of settlements, or the village. The territorial group was materially responsible for an offense such as homicide or theft committed on its territory if the malefactor was unknown, if the inhabitants did not wish to give him up or to punish him, or if the malefactors were not promptly run down. This responsibility had appeared in the *Zakonnik Dušana* and the Wislica Statutes; in Poland it continued still longer and spread to the towns. In the Polish cities it often took the form of "representational punishment," as when city aldermen were sentenced to death.

Primitive responsibility was of an objective nature; the factor of guilt was not considered. A master was responsible for his children, his domestics and his animals, and a property owner was responsible even for his possessions; the owner of a pond, for example, was held responsible for homicide if a person drowned therein. As was general in the history of criminal law, this responsibility in the course of time assumed a strictly individual character, and even then only in case of subjective guilt.

In early Slavic law court procedure came to be accepted in case of quarrels within the social group. The trial began to take the place of retaliation when the power of the prince was made permanent and government offices were established. This occurred earliest among the southern Slavs and in Bohemia, latest in Poland. According to the Statutes of Casimir, if the loser did not wish to submit to the verdict, the court turned him over to the plaintiff, who lost his claim if he allowed the loser to escape. Execution then was in the hands of the parties, and it was not until the fifteenth century that execution was assumed by the court. Even then, however, the parties to a contract might make the reservation that in case of non-fulfilment the loser had the right to execute his claim.

From the fifteenth century on sources for Slavic law are more numerous. Considerable differences now developed and only in a few cases is it possible to find analogies which may be supposed to have a common origin. Because of widespread illiteracy the oral principle naturally obtained, as did that of public sessions. The principle of accusation also was general; if a prince were involved he seated the judge in his own place and stated his own complaint. It may be accepted as certain moreover that the primitive period was characterized by formalism. Some of the means of evidence may be

considered common to all Slavic law. Among them are the oaths of the litigants, which possessed a sacral character, and which were naturally later adapted to the rules of the Christian religion. A vestige of an older period perhaps is the oath by the sun, which was a practise in Bohemia in the fourteenth century and in Poland in the fifteenth and traces of which remained among the southern Slavs and in Russia. Among all the Slavs until the fifteenth century the judgment of God was a means of evidence; in Serbia there was the ordeal by hot water, by fire, by hot iron; in Poland there were in addition the judgment by duel and the cold water ordeal; in Russia and Bohemia the duel and the ordeals by water and iron were common; among the Slavs on the Elbe the duel and the ordeals by iron and by boiling water were practised.

STANISLAW KUTRZEBA

CELTIC. Of legal institutions among the continental Celts before they became subject to the Roman Empire little is to be learned from ancient writers and that only incidentally. The episode of Orgetorix, as related by Caesar, shows among the Helvetii an established judicial system supported by the executive power of the state. Caesar also records that as a mark of favor he restored to the Atrebates their own rights and laws. He also observes that these peoples, dwelling on the eastern frontiers of Gaul and exposed to constant danger of invasion, were noticeably less advanced in civilization than the other Gallic states of the central and western regions.

For a knowledge of Celtic law ample in scope and detailed, dependence must be placed mainly on the written records of the ancient laws of Ireland and of Wales. The Welsh code was drawn up in the tenth century under Howel Dha, who united the various principalities of Wales under his own rule. In their existing form, however, the Laws of Howel Dha represent a later redaction and exhibit very markedly the influence of feudalism as established in England and in parts of Wales by the Norman-Frankish invasion. The Irish law tracts are more purely Celtic in tradition, much wider in scope and richer in detail, and they go back in written form to the seventh century and to a Celtic regime undisturbed by any external force except the peaceful invasion of Christianity. The most important of them is the *Senchus mor*, the principal ancient collection of Irish law, dating at least from the ninth century.

The Druids of an earlier age were transformed

in Christian Ireland from the fifth century onward into a class of professional men of learning called *filidh*. These were the accepted authorities on all subjects of national learning, including law, history and genealogy, grammar and poetry. Like the Druids they taught in schools and gave permanent form to much of their teaching by means of versification, so that their name *filidh* is commonly translated into English as poets. The oldest writings on Irish law point clearly to an older tradition of oral teaching, coming down to the seventh century. They usually take the form of question and answer, a studied mnemonic phraseology, with rules and terms grouped as it were in litanies, with passages here and there in archaic verse. The language of the oldest written tracts was already becoming obscure in the ninth century and was explained by glosses interlined or added in the margins of manuscripts. The older tracts are usually accompanied by commentaries of various dates. In these under the guise of explanation the ancient doctrines are often adapted and developed.

Irish law like Roman law was a learned law and was molded into bodily form in the hands of jurists, and this juristic law was supplemented by legislative enactments. Ireland like other countries in the Indo-European tradition was divided into many small states, each forming a separate jurisdiction with a complete if simple apparatus of executive and judicial administration and also of legislation. The *filidh*, however, like the Gallic Druids of Caesar's time, were regarded as belonging in common to the whole nation, and the law expounded by them was equally applicable in all the states. Irish law was thus one jurisprudence in many jurisdictions. It has this character of universality in the oldest records of history and tradition. Moreover since the oldest documents exhibit not only a didactic form but a long existing classification into matters and separate books and chapters, with numerous other juristic refinements, it is a capital error, although it has been a common one since Sir Henry Maine, to seek in them a record of purely primitive customary law, even though the jurists were never weary in asserting as the basis of their doctrine the custom of the *feni*, the freeholders of Irish land.

The earlier Irish jurists had a peculiar fondness for objective detail, for cataloguing the acts and facts to which the rules of law were held applicable. Incidentally thus the early Irish law tracts provide in great variety the parts from

which, when they are duly assembled, there may be formed a fairly ample description of the manner of life of an ancient community. This community is typically European as distinguished from Mediterranean. In the Mediterranean regions the vigorous Indo-European stock came under the powerful influences of Egypt and Crete and Phoenicia and developed a civilization based on walled cities. The continental Celts became somewhat Mediterraneanized—Plutarch writes that they defended eight hundred walled towns against Caesar's legions. In Ireland, when Irish laws were first recorded in writing, there was not one such town. Each of the eighty or ninety small states into which the nation was organized was purely a city of the fields. The whole community lived on and by the land. The nobles were a higher grade of agriculturists. The rural organization of society represented in the law tracts must be almost in the pure line of development from an older form of common European society on a rural basis. Its structural institutions—the small state; the assembly; the court; the kingship uniting the functions of head of the court and assembly, judge, military commander, probably also at one time priest; the organic unity of the group of families within a limited zone of kinship—these and other features of the social system reflected in Irish law are likely to have their roots in a prehistoric order common to the ancestral Indo-European stock before the era of its expansion (which is still in progress) had begun. It is to be noted that this ancestral stock before its dispersion practised tillage on no small scale by means of the plow drawn by a team of oxen. Hence it is a cardinal error in studying the laws and institutions of any branch of this stock from the standpoint of historical jurisprudence to start from an a priori notion of a primitive stage of society, such as the stage of pastoral nomadism.

In each *tuath*, or state, the freeholders were the normal and typical class to whom the franchise belonged. They were the freemen, who had the right of participation by presence and voice in the conduct and regulation of public affairs. To the same franchise, however, were admitted by virtue of profession certain other classes; the members of certain crafts recognized as free or liberal—a remarkable concession when it is considered that in Mediterranean civilization the craftsman was always a slave—men of learning and churchmen. But to be without franchise, except in the case of slaves, did not

imply privation of civil rights. The rights of those without franchise could be made effective and their wrongs could find remedy through the action of freemen to whom they were attached by some form of legal nexus; women and children, for example, were assisted by heads of families, clients by their patrons, tenants by landowners, men of the unfree crafts by the freemen who employed them, aliens by freemen who had formally taken them under protection.

The sons, grandsons and great grandsons of one male ancestor constituted the *derb fine*, or true family. If one of these died without issue, his property became divisible among the others in fixed proportions, a brother inheriting a larger share than a first cousin and so on. Compensation for the homicide of a kinsman was divided in like proportions. If a kinsman defaulted or became insolvent in respect of his legal liabilities, these were shared in the same proportions among the *derb fine*. The ordinary law of kinship governed succession to kingship. When a kingship became vacant, all those who were sons, grandsons or great grandsons of the last or any former king became eligible to succeed and the successor was chosen by election from among them. Property was owned in severalty by members of a kin, and each member was free to dispose of property acquired by himself but could be inhibited by his kinsmen from diminishing the joint property of the kin or from involving it in loss by damnifying contracts.

A notable feature of ancient Irish law is the favorable status which it accords to women. Women could own and inherit property in land. Marriage from the point of view of property and industry was an economic partnership. If the partnership ceased, the wife retained her right to the property which she brought into it and also to the increment arising from her share in the concern. Generally speaking, the husband was manager of the land and the wife manager of the household and of the domestic industries, such as dairying, spinning and weaving. Moreover the position of women in Irish law cannot rightly be ascribed to juristic ideas of equity. It is fully reflected in the saga literature, which is a storehouse of prehistoric tradition. Its origin may be traced to a pre-Celtic population of Ireland and Britain, the Pretani, better known by the name of Picts, among whom the family and kin were based on maternal and not as among the Celts and other Indo-Europeans on paternal descent. A man "married into" the family and kin of his wife, and inheritance, in-

cluding succession to political authority, passed in the maternal line. It is likely that the order of Druids was also of Pretanic origin. The ethnic relation of the Pretani to other peoples of western Europe has been the subject of much speculation.

The movable and exchangeable wealth of the country was chiefly in the form of cattle. When a landowner had a surplus of wealth in cattle—it might also be in other things of value—he could dispose of it as capital, *rath*, loaned to other landowners who required it. The contract of giving and receiving capital created between the two parties a legal nexus so similar to the nexus of patron and client in Roman law as to indicate a common origin. In terminology the lender became *flaith*, political chief, to the borrower, and the borrower became *ceile*, companion, to the lender. The contract was deemed advantageous to both. The chief became entitled to a large interest on the capital, to various services, refectations and reliefs, to the presence of the client under his command on military service and in his retinue at public assemblies. The client became entitled to the protection of his legal interests by the chief, who acted as his representative, advocate and spokesman, in the public courts and assemblies. A man could be at the same time client of a chief and chief of other clients. There is some superficial resemblance between Celtic clientship and feudal vassalage, but the differences are fundamental. Clientship was a personal contract between two individuals, terminable by death or at the will of either party under terms fixed by law. Under the feudal system the man who became a vassal bound himself and his heirs forever and ceded a superior ownership of his land, of which thenceforward he and his heirs became tenants.

A characteristic feature of Irish law is the constant effort to fix an arithmetical value, relative or positive, in ratio or in fixed amount, for rights and liabilities of almost every kind. This is well exemplified in the case of honor price. An offense against the rights of a freeman incurred a twofold liability, equivalent restitution for his material loss and reparation for the wrong done to his dignity. The second element, honor price, varied according to the status of the injured person. Its amount was predetermined by the classification of all freemen in defined grades of status. The general basis of classification was wealth, chiefly in land and livestock. There were several grades of freemen according to the measure of their wealth, and for freemen of each

grade there was a fixed honor price. Most freemen became clients, and the amount of capital in the contract of clientship was fixed for each grade. When a patron acquired ten or more clients, he rose to a higher zone of status as a ruling noble; and within this zone again there were grades of status, each grade having its definite honor price, the graduation being based jointly on wealth and on the number of clients. Certain powers and privileges, for example, the right of protection over aliens, varied in the measure of honor price. Refusal to submit to adjudication or to fulfil a judicial award involved loss of honor price. Thus the institution of honor price operated as a check on the tendency of powerful nobles toward arbitrary conduct in disregard of the law. Grades of status and honor price commensurate with the grades of ruling nobles and freemen were fixed for ecclesiastics, professional men of Irish learning and of Latin learning and men of the liberal crafts.

The law of contracts was elaborated in much detail by the Irish jurists. They distinguished between a simple contract, *cor* or *cor bel*, "contract of the lips," and a secured contract, *cund-rath*. This recognition of an informal contract may be regarded as remarkably advanced. There were various kinds of security, and the precise difference between these as well as their manner of operation awaits full investigation. *Raith* (distinct from *rath*, capital advanced to a client), in later usage *trebaire*, appears to mean the simple guaranty of a third party; like surety in English the word often denotes the person guaranteeing. This person must be a freeman of the same *tuath* as the contracting parties. Accordingly in juristic language a freeman in his own *tuath* is called *aurrath* (later *urrad*), meaning literally one who is capable of becoming surety on behalf of another, while a freeman in a *tuath* not his own is called *deorath* or *deorad*, signifying that he is there incapable of becoming surety. *Giall* and *aitire* both meant hostage, but there was some distinction between them. Hostages could be given and taken in some kinds of civil undertakings between fellow citizens. There were elaborate provisions as to distress.

The office of judge in litigation belonged normally to the king of a *tuath*, with the assistance of an expert jurist (*brithem*, or brehon, usually translated as judge; hence the term Brehon Laws). A brehon was competent to adjudicate in a suit referred to him by the parties. With this form of adjudication in view various modern writers have supposed that judicial decisions

under Irish law had no executive sanction and were made effective only by the force of public opinion, so that judgment by a brehon would have been a form of consensual arbitration. It was unlawful, however, for a brehon to hear a suit without having first taken adequate security for the fulfilment of his award. The error of attributing the judicial function solely to the brehons has led to another illusion, repeated by many modern writers; namely, that Celtic law took no cognizance of crimes, regarding all illegalities as torts. Some foundation for this misconception may be seen in the very wide range of offenses which could be atoned by compensatory payments in Celtic law, but the error arises from ignoring the criminal jurisdiction of kings, of which the evidence is abundant. Even in the case of torts persistent lawbreaking and contumacy rendered the offender a criminal, involving penalties varying from loss of status to capital punishment. Moreover there were even means of exercising extraterritorial jurisdiction, a frequent necessity in view of the small territorial extent of the Irish states, which did not average more than about 400 square miles in area. Two methods of determining the issues by process of law when the parties to a dispute belonged to different jurisdictions are indicated. An agreement to establish a common jurisdiction, *cairde*, might be formulated between the kings and ratified by the assemblies of each state. In the absence of such agreement the authority of a superior king could be invoked, to whom the kings of the respective states were in a definite manner subordinate. There is indeed little truth in the notion that Irish law was a rude tribal system of law.

EOIN MACNEILL

CIVIL. *See* CIVIL LAW.

CANON. *See* CANON LAW.

COMMON. *See* COMMON LAW.

ISLAMIC. *See* ISLAMIC LAW.

CHINESE. Although in China as in all other countries public law made its appearance long before private law, the most ancient known documents contain important moral rules concerning marriage or succession. Whether these rules were regarded as laws in the Judæo-Greco-Roman sense can be determined only by a study of philosophical tendencies in ancient China.

Confucianism holds that the prince worthy of the name has no need for laws in governing. Chief of men by virtue of the mandate of heaven, his example alone shall teach. But how does he discover what rules of conduct to lay down? The Chinese have always believed in a universal natural order existing in the heart of man as well as in the physical universe. Their cosmogony establishes correspondences between the five human relations (*wu lun*)—of prince to subject, father to son, husband to wife, elder brother to younger, friend to friend—and the five planets, the five sounds, the five metals, the five cereals, the five colors. An immense role was always assigned to magic, horoscopes, the action of elemental influences and the like. There is an interaction between the natural order of the universe and that of the moral world. For man to conform to the natural order is to show respect to the general laws of the universe, but it is also to stir them to action, to give them an opportunity to manifest their nature. For example, it is natural in winter to cover oneself with thick clothes and in summer to wear fewer or thinner clothes. The ancient Chinese thought that if one were to reverse the actions, the seasons would not be normal and correct. Man's mistake would react upon the order of the universe. Throughout Chinese history the bad sovereign is precisely the one who by his misconduct troubles the universe.

The *Chung yung*, a Confucian book, begins by stating that heaven has put the natural law in the heart of man; the "way" (*tao*) consists in living in conformity with this law; man is kept in the way by teaching, which the wise sovereign spreads by permitting men to discover in themselves the eternal relationships. The process is thus described in a celebrated text of the *Ta hsüeh*: "The ancient princes who desired to light up the Universe with shining virtues began by governing their country well. Desiring to govern their country well, they began by ruling their family. Desiring to rule their family, they began by perfecting their own character. Desiring to perfect their own character, they began by making their heart right. Desiring to make their heart right, they began by making their intentions sincere. Desiring to make their intentions sincere, they began by increasing their knowledge. Increasing their knowledge consisted in thoroughly understanding things. Things being mastered, their knowledge became complete. Their knowledge being complete, their intentions were sincere. Their intentions being sincere, their heart

was made right. Their heart being right, their character was perfected. Their character being perfected, their family was ruled. Their family being ruled, their country was well governed. Their country being well governed, the whole empire was at peace."

Thus the good functioning of the social and juridical organization rests wholly upon the sovereign's personal worth, his ability to grasp the laws of universal harmony and teach them by example. This is *jên chih chu i*, or government by men, because the government is identified with the sovereign's personality. In a society founded on duties flowing from natural relations (*wu lun*) taught by an enlightened sovereign order does not depend on laws. The duties are divined by observance of rites (*li*, best but not satisfactorily translated by the German *Sittlichkeit*), which associated with music suffice to police the empire of the south.

This conception of law was reenforced by the special characteristics of primitive Chinese logic. According to the theory of the "rectification of names" (*chéng ming*) formulated in the *Lun yü* (xiii: 3): "If names are not correct, language will not conform to the reality of things and affairs cannot succeed. If affairs cannot succeed, rites and music cannot flourish. If rites and music cannot flourish, punishments will not be inflicted justly. If punishments are not inflicted justly, people will not know how to move their hands and feet. Consequently, the sage deems it necessary that the names we use should be correctly employed, and that what we talk about should be rightly put in practice. What the sage desires is that in one's words there be nothing incorrect." This theory was especially developed by Hsün Tzŭ and Yin Wên Tzŭ and greatly influenced the Confucian analysis of the notion of law. Under this aspect it pertains less to the substance of law itself than to its formal intellectual enunciation. In addition to being a logical theory it is, especially in Hsün Tzŭ, an ethical conception, for it is in seeking to rectify names that one can rectify one's conduct. In the work of Hsün Tzŭ (*Chéng ming pien*, ch. xxii) is set forth the Confucian notion of law, founded upon belief in the universal natural order and the possibility of maintaining and observing this order by giving things their exact definition. But the theory of the rectification of names did not lead to the forms of reasoning indispensable to imperative notions of law and the establishment of a complete positive legislation. As in the quotation from *Ta hsüeh*, the formulations are always so-

rites, a form of incomplete and degenerate syllogism. Generalization, abstraction, the reduction of a great number of concrete cases to unity, in a word the belief in the principle of identity, are absent from Confucianism; and hence the legists of this school have at their disposal only a very simple, even simplistic, technique of legal interpretation. The triumph of juridical reasoning in China during the traditional period is the employment of a method of analogy, *tui li chieh shih*, carried to its utmost terms.

The Confucianists were early opposed by the philosophers of the School of Laws, or *Fa chia*, whose conception is infinitely closer to the Judaeo-Greco-Roman conception. It considers as illusory the proposal that the sovereign govern by example and without sanctions. For the notion of government by men, *jên chih chu i*, it substitutes that of government by law, *fa chih chu i*; the law, *fa*, is thus opposed to rites, *li*. The sovereign's personal qualities are irrelevant, since he is only to see that abstract laws formulated as rigorously as possible are observed. The conceptions of this school of legists inspired a number of statesmen and ministers of the "Fighting Kingdoms," furnished an essential contribution to the elaboration of Chinese juridical theories and resulted in the founding of the first absolute kingdom, that of Ch'in, in 225 B.C. Strict codes and laws were promulgated, bringing protests from the disciples of Confucius.

Despite the efforts of the legists, however, the Confucian conception came to dominate all ancient Chinese legislation. The literary examinations killed the technical disciplines, thus hindering the formation of a class of professional jurists. Law became fundamentally one of custom. Everything pertaining to the law of contracts and commercial transactions was abandoned to the free creation of custom. There was a resort to legislation only where the public order was vitally concerned. But even this expressed only those teachings of the past, that conformity of moral and natural order, that experience of wise sovereigns, which constituted the ideal of "government by men." Only because the texts of the ancient imperial legislation on the family or succession had their origins in the oldest rituals did they evoke the adherence of primitive Chinese mentality. Administrative and penal law were also thoroughly codified in the interest of an ordered state. Another consequence of the influence of the Confucian conception was the extraordinary continuity between Chinese codifications. The various dynastic codes preserved

very ancient rulings, which were no longer applicable, because they derived from a system formerly held in great honor. To this day the law does not have in China the imperative character that it has in the West. It is still regarded as a model which will be imitated more easily the greater its conformity with universal natural order.

The struggle between the Confucian conception and that of the legists has left its mark upon the whole evolution of Chinese law. If the Confucian writings and rituals are not sources of the law in the modern sense of the term, their instructions or prescriptions have in fact often had the value of positive rules. Thus the poetry of the *Shih ching*, the narratives of the *Tso chuan* and the discussions of the *Li chi* were often basic in ancient Chinese juridical life. When the Supreme Court of China had to apply rules on repudiation a few years ago, it cited the relevant ritual text.

Very early, however, and despite Confucianist objections the various kingdoms of the middle country enacted codes. Regarding the most ancient codifications, such as the Book of Penalties in nine chapters (1050 B.C.), the chapter "Lü hsing" of the *Shu ching* (952 B.C.), the various codes of Ch'in of Chêng; and the *Fa ching* of Li k'ui (c. 400 B.C.), there are available scattered items of information in ancient literature. The early Chinese encyclopaedias and dynastic histories are valuable in tracing the development of Chinese law. A modern work, the *Chiu ch'ao lü k'ao* of Cheng Chu-tê, covers the legislation of the dynasties between 206 B.C. and 618 A.D.

The method and plan of the later imperial codification are already foreshadowed in the early codes. The T'ang Code (653), which was in fact the first complete imperial legislative monument and was destined to serve as a model for all others in form and essence, marks the maturity of ancient Chinese law. Its plan and many of its rules were adopted successively by the Sung, Yüan and Ming dynasties. The original of the code which was in force when the Chinese Republic was proclaimed in 1912 was enacted in 1646 by the Manchu dynasty a few years after its seizure of power. Known as the *Ta Ch'ing lü li*, that is, the fundamental laws and statutes of the great dynasty of Ch'ing, the code exists in numerous official editions, being promulgated with each change of sovereign. Each edition involves more or less important revisions. The text in force in the last years of the empire dated from 1890. All the rubrics of the code contain *lü*, the

fundamental and ancient laws, and *li*, supplementary statutes or laws representing crystallized jurisprudence. Translated into English by Sir George Staunton in 1810, the code has served in the West as the chief source of Chinese law. The technical value and social efficacy of the whole grandiose codification, covering almost the entire social organization of the empire, owes nothing to Judaeo-Greco-Roman foundations.

The penal system and the regime of the family and succession as they appear in the monumental Chinese imperial code may be examined with the greatest profit, for they best exhibit the spirit of Chinese law. Even as late as the nineteenth century the Chinese had not developed any true system of private law. A large sphere of regulation was left to the family. To the guilds was left the settlement of commercial disputes. Such rights as are called private in the West were normally secured by penal sanctions. The entirety of imperial Chinese legislation was made up of penal sanctions. Chinese jurists did not distinguish between penal and civil responsibility.

At the head of the dynastic codes came a series of tables and chapters devoted to the enumeration of penalties; to the release from penalties by payment of a fine; to rules of kinship, which were taken into consideration in cases of increase or decrease of penalties; to general theories of responsibility and such doctrines as incrimination, excuses, complicity, accessories, attempts. The celebrated "five punishments" of ancient China have frequently varied in nature. On the eve of the revision of the *Ta Ch'ing lü li* in 1910 they were: lesser beating, severe beating, temporary exile, permanent exile, death (by strangling, decapitation or dismemberment). The table of releases contained a series of charges for release for the various social classes: old men, children, sick persons, women in general, wives of officials, wealthy men, astronomers. In the table of mourning regulations were defined the complicated and detailed blood relationships of the Chinese family, which played such a large part in fixing penal responsibility. All relatives were listed in five classes of mourning, the most immediate relatives being those whose period of mourning was the longest. Special infractions were treated in book vi (*Hsing pu*), the most important of the entire code.

The fact that general theories figure at the head of the code is significant. The Chinese were brilliant criminologists and in the course of their long history elaborated the majority of the con-

ceptions which today inspire the penal laws of civilized states. Departing from the cherished juristic principle that "punishment must be eliminated by punishment," they gave preference to an objective conception of responsibility and to the strengthening of the intimidating character of penalties. Behind the most involuntary deed, the slightest objective risk, they sought a responsible person. The notion of main force was in an embryonic state. When the natural order was disturbed, someone in the universe had necessarily committed a fault. Even children, idiots and animals might be punished. The vicarious responsibility not only of relatives but of officials has had a long history in China. In a very crude form the Chinese knew the modern objective conceptions of social danger and measures of security.

The Chinese system of family and succession has been the subject of considerable study. Historically there was a period when maternal kinship was predominant; after a period of transition agnatic kinship was finally established. Of the two early periods some traces remain in present day legal institutions. Despite the agnatic basis of kinship the order of generations is alternated—in the order *chao mu*. In the imperial codification the basis of the family organization remained the clan (*tsu*) composed of a certain number of families (*chia*). The clan included all the individuals of the same stock (*tsung*). In principle the community of name (*hsing*) had to correspond to the identity of *tsung*. An exogamic rule which disappeared only in 1910 prohibited marriage of persons of the same name, since they were considered as having the same paternal ancestor. The clan possessed as common property a certain number of goods, among which is the *ssü t'ang*, or temple of ancestors. These goods were administered by the clan chief, who likewise had the duty of holding the genealogical table (*tsung pu*). Within each family functioned the patriarchal regime. The lesser members of the family could neither share in the family goods nor have a separate establishment while their parents were alive.

Marriage was encumbered with severe and precise technical rules. Divorce was almost entirely confined to the husband. The traditional seven grounds of divorce were: unfilial conduct (toward husband's parents), adultery, jealousy, loquacity, theft, grievous disease and barrenness. Concubinage was legal but is not recognized by the modern civil code. An interesting matrimonial institution retained in the present code is

that of the son-in-law who summoned into the family of his father-in-law thus takes the name of his wife.

The law of succession was also the object of imperative texts in imperial legislation. Many of these texts had their origin in the most ancient rituals. The entire system rested on the fundamental distinction between succession to ancestor worship or to the paternal stock (*tsung*) and succession to the patrimony. The first was regarded as essential to the maintenance of the ancestral line of the family. In order to assure the continuity of the *tsung* it was necessary to establish as heir the son of the chief wife; if there were no children, the heir had to be decided upon according to the conditions fixed by the law. It is this institution of the heir which has so constantly been called by the dubious and equivocal term adoption. The heir had to be a male of the same *tsung* as the appointer; he had to be chosen according to legal order, that is, on the one hand the alternating order of generations (*chao mu*) and on the other the order called "from relative to relative" (*ch'in ch'in chih i*). Other rules determined special cases in the appointment of heirs, such as the fictitious appointment, which made it possible for an only son to inherit from two branches of the family. Succession to patrimony is in principle linked to succession to the cult. But if the heir to the cult has ipso facto the right to an amount of property sufficient to permit him to discharge his obligations, the surplus property may be given to others, even to third parties or to daughters, who can never succeed to the cult.

Even under the empire Chinese law was often adapted to changing conditions by customary modifications. In the latter years of the empire the reform party advocated the establishment of modern legislation modeled on European codes. The program of legal reform was based on a desire to prepare the ground for a change of regime and to persuade foreign powers to abandon extraterritoriality. Westerners felt particularly the lack of a modern system of commercial law and, accustomed to highly subjective Christian doctrines of responsibility, were loath to submit to the Chinese criminal law.

A codification commission instituted at Peking in 1902 functioned under various titles for a quarter of a century with the assistance of Japanese and French councilors. During the period of the separation of the north and south of China a commission similar to this one functioned in Canton. At present a complex process of codification brings into play both government

and Kuomintang organs. Interior Mongolia and Tibet are under a special regime, but their law also is being recast by the Chinese government.

The first result of the movement for legal reform was the revision of the *Ta Ch'ing lü li* in 1910. Its main objective was the suppression of penal sanctions for civil responsibilities. The penal sanctions were replaced by sanctions of nullity, annulment and indemnity and the revised code was called *Ta Ch'ing hsien hsing hsing lü*. A provisional penal code was published in 1912. Since then many laws on special subjects as well as general codes have been enacted. Five books of a civil code were promulgated from 1929 to 1931, and codes of civil and criminal procedure and a criminal code in 1928. Commercial legislation and legislation relating to private international law have also been adopted. The collected legislative and regulatory texts are contained in three large official volumes, entitled *Tseng ting Kuo mir cheng fu ssü fa li kui* (3 vols., 2nd ed. 1931).

The new Chinese legislation, imbued with a strong social spirit, has sought to realize the "three principles of the people" (*san min chu i*) of Sun Yat-sen; these are the principles of nationalism, democracy and popular economic progress. The ancient regime of the family and succession which has governed China for centuries has been profoundly modified by the new civil code. While many of its old features have been retained, a new system of family organization more in harmony with western ideas has been substituted. The new legislation has in view, however, not only the family but the whole nation. While the ancient laws and rites protected the monarchical regime, the power of a single man, the new legislation protects the rights of the people, of the whole nation; while the ancient laws and rites considered economic relations only to the extent to which they were founded upon the family and agriculture, the new legislation tends to harmonize all interests and activities, including commercial and industrial; while the ancient laws and rites erected a juridical organization in which public and private law were confounded, the new legislation tends to separate them. Since the *san min chu i* contain the whole spirit of the new legislation and suffice to construct its technique, the need to borrow European or American laws and institutions has been denied by some Chinese, who look instead to a rebirth of "government by laws" affirmed twenty centuries ago by the non-Confucian schools.

Beside the new written legislation custom

continues to play an important role in the elaboration of Chinese law. Through it many of the traditional rules borrowed from imperial legislation remain potent. Moreover article 1 of the civil code declares expressly that the tribunals ought to apply custom in default of adequate legal provisions, and since 1912 the Supreme Court of Peking has set down a certain number of rules to guide the judge in this application. At the end of the empire an official investigation had been begun in all the provinces in order to determine the legal value and the significance of the principal customs. Two volumes of the report of this inquiry, which ended in 1925, were published in 1930 under the title *Min shang shih hsi kuan t'iao ch'a pao kao lu*.

Most writers on the present state of Chinese law fail to evaluate the important role of judicial decision. Modern codes and laws would not be viable without the aid of the interpretation given by the courts of justice. Since 1912 the Supreme Court of Peking has played a major role in the elaboration and preparation of the modern law. The publication of the *Recueil des sommaires de la jurisprudence de la cour suprême* by Jean Escarra and others (3 vols., Peking 1924-26) marks a date in the knowledge of Chinese law. But it is not only by decisions of a contentious nature that modern Chinese law is enhanced. There is another variety, called decisions of interpretation, *Chieh shih li*, whose technique goes back far into the legal past of China and which are of great importance today. According to texts in current usage the president of the Council of Justice, after receiving the advice of the president of the Supreme Court and of the president of the competent chambers of the court, has the "right to unify the interpretation of the legal and regulatory provisions and to modify the judgments." These decisions are eventually incorporated with the written law, just as the *li* were added to the *lū* of the imperial codifications. And as of old it is in these interpretative decisions rather than in the rules of the code that the profound vitality of Chinese law resides. There may be discerned the secret of the easy adaptation of the new legal principles to a society still quite impregnated with ancient legal traditions whose technique and inspiration are essentially different from those of the West.

JEAN ESCARRA

JAPANESE. The native law of Japan like the primitive laws of other nations retained elements of a magico-religious law. In archaic Jap-

anese, law was called *nori* (declared word), for it was an oracle which was revealed through divine inspiration. The *nori* was announced by the official from the top of a hillock (*tsuka*), hence the word *tsukasa*, which means an official. All *nori* were unwritten declarations; the earliest written document which may be considered as law, the so-called Great Charter in Seventeen Articles of Prince Shōtoku, dates from 604 A.D. A chief function of the magical rulers was to make known to the people the will of the deities; hence they were called *hishiri* (knower of the spirit), and the action of governing was termed *shiru*, *shirasu* and *shiroshimesu* (to know). The oldest Japanese records, *Kozhiki* and *Nihon-Shoki*, and the Chinese work *Wei chih* give the names of many feminine rulers in Japan. Offenses were designated as *tsumi*, being regarded as so unclean that they must be concealed (*tsutsumi*) from the deities. In ancient times *tsumi* were cleansed by the rite of purification (*harae*) in order to appease the anger of the gods; if there was doubt as to the presence of a *tsumi*, the question was decided by the ordeal of boiling water.

Since most of the Japanese deities were ancestral spirits, their adherents were limited to persons who were believed to be descended from them; and only those who guided their conduct by the will of the ancestral deities composed the kinship group considered to be their progeny. Such a group was known as *uji*, a clan; its members as *ujibito* or *ukara*, persons of the *uji*; its chief as *ujiko-no-kami*, head of the children of the *uji*, or patriarch; and the deity proper to it as its *ujigami*, deity of the *uji*. The *uji* was not only a social but an economic unit. The government of ancient Japan consisted in the magico-religious sway exercised by the most influential *uji*, and it was the *ujiko-no-kami* of the latter, ruling, as it was supposed, in accordance with divine will, who controlled the lesser *uji*. In the historical period the controlling *uji* was that of the mikado; its chief, more properly known as *sumera-mikoto*, was the sovereign of the primitive Japanese state, and the chiefs, such as the *omi*, *muraji*, *sukane* and *inagi* of the other *uji*, were its principal functionaries. The rank of the *uji* to which they belonged determined the social positions of the chiefs and of all other persons; no one, however able, could aspire to an office for which he was not properly eligible. The ideal in the social life of the ancient Japanese may be said to have been simply that each person should perform the duties of his office or remain

in his preordained status, observing the *nori* of his own chief and the *mikoto-nori* (edict) of the *sumera-mikoto*, thus insuring the perpetual peace of the community. Unfortunately records do not sufficiently reveal the primitive state in which the purely native law of Japan prevailed. The society depicted by the oldest extant records had already begun to be influenced by Chinese culture and its indigenous magico-religious law was no longer free from secular elements.

From the end of the sixth century the great empires of the Sui and T'ang dynasties rose successively in China, menacing Japan by their repeated conquering expeditions eastward. In order to preserve its very existence the insular state was impelled to replace with the centralized legalistic organization of these empires its own historic regime of a loose federation of clans. The reforms of 645, which were known as the civil revolution of the Taikwa era, were in fact a movement to establish around the sovereign the centralized state which this crucial situation necessitated; the Ōmi codification which followed in 661 was an attempt to transplant Chinese law in order that the organs of the new state might function. This code was revised into the *ritsu* and *ryō* codes in 678 during the reign of Tenmu, was again revised in 701 as the *ritsu* and *ryō* codes of the Taiho era and was still further altered in 718 to constitute the codes of the Yōrō era. The *ritsu* (prohibition) consisted of penal rules; the *ryō* (command) contained rules of administrative, judicial, civil and commercial laws. Since they aimed at the realization of the ideals of Confucianism the codes included few provisions of private law. In 819 were compiled the *kyaku* and *shiki* of the Kōnin era, in 869 those of the Jōgwan era, in 905 the *kyaku* and in 925 the *shiki* of the Engi era. The new enactments may be called collections of edicts and by-laws, for the *kyaku* were pronouncements amending or abrogating parts of the *ritsu* and *ryō*, and the *shiki* were subsidiary regulations for the execution of the *ritsu*, *ryō* and *kyaku*. These completed the instrument of the political and moral control of the nation by the centralized government. Because the interpretation of the law was the subject of dispute among professional jurists, who wrote comments and treatises upon it, in 833 an official commentary was issued, called the *Ryō-no-Gige*. As the four bodies of law and the commentaries were all fashioned after the Chinese system, it seems difficult at first glance to discover therein the native law of Japan, but a comparison of the con-

tents of the Chinese and the Japanese laws based upon them reveals clearly the existence of indigenous elements in the latter. Crude as the native law had been in contrast with the newly received legal principles, it had embodied the spirit of the Japanese people and could hardly have been eradicated by the mere acceptance of an alien law; even while the civil nobles at Kyoto were engrossed in Chinese culture, when the centralized government was at its strongest, the native law held a strong position among the gentry and peasants of the rest of the country. Since private law had been largely abandoned to the hazards of historic custom, that branch was least influenced by law copied from the Chinese.

After the rebellion of Masakado in 939 the influence of the centralized government declined; and when new classes of warriors (*samurai*) were formed from among the local gentry, the native law by which they had been living also gained a powerful position. This revived native law, however, was no longer the same as the primitive but had cleverly incorporated elements of the accepted Chinese law. In the *Goseibai-Shikimoku* or *Jōyei-Shikimoku* of 1232, formulated by the shogunate of Kamakura, both laws are so intimately blended that it is difficult to reduce the individual rules to their origins. The *Goseibai-Shikimoku* was not only the fundamental code of both the Kamakura and Muromachi shogunates (1185-1573) but served also in the fifteenth century as a model for legislation in many territories of the local barons. This code, which was practical, flexible, extremely concise and of summary execution, may indeed be considered as singularly Japanese and feudal in character.

Although the new Japanese law represented by the *Goseibai-Shikimoku* was gradually enriched by the experience of the nation during the centuries which followed, its greatest development both in content and technique was achieved only after the seventeenth century. Following the battle of Sekigahara in 1600 the military power and the skilful government of the Tokugawa shogunate maintained peace for nearly 270 years; during this period native culture, commerce and industry attained a high degree of development. The new native law, which had been feudal, now assumed a markedly civil character; and even commercial and mercantile laws and the law concerning bills of exchange developed without any foreign legal influences. Among the legal monuments of this period the most famous is the *Kujikata-Osada*-

megaki, compiled in 1742, a code in one hundred articles, hence known also as *Osadamegaki-Hyakujō*; but the chief legal sources are the innumerable accumulated judicial precedents.

The visit to Japan of Commodore Perry of the United States navy in 1853 was the first attempt on the part of foreign powers to force an entrance into Japan. In 1868 public opinion, supported to some extent by the influence of the powers, responded to the spirit of the new era and finally led to the destruction of the Tokugawa shogunate, which was based upon feudal institutions. In its place a new empire was established under the ancient sovereign but founded upon a capitalistic social order. The Japanese law of today, based upon the codified law of Germany, is replete with elements of European law hastily imported after the establishment of the new regime in 1868. There was at first a fairly strong desire to preserve the native Japanese law, but because of the necessity of revising the unequal treaties which had been imposed by the foreign powers, and which provided for extraterritoriality, the new codes of law, which were completed about 1908 and which included constitutional law, penal law, commercial law and the laws of civil and criminal procedure, were cast in markedly European mold. For this reason, very few elements of the native law survive in the present Japanese law, and even these are for the most part not purely native but rather the results either of the transplantation of Chinese law which occurred a thousand years ago or of subsequent developments from Chinese origins. The chief remnants of the Japanese law of non-European origin are found in the constitutional law, the family law, the law of succession and the commercial law. The outstanding institutions which have survived are the *inkyō*, the *iriai*, the law of *mujin-gyo* and the *sekifu*.

The present law concerning the *inkyō*, or the retirement of the head of the house, provides that in order to permit the heir to succeed to his status the house head may resign his position for a specified reason recognized by law; the resignation is a unilateral act with bilateral effects. Four reasons for retirement are recognized by the present law: old age, above the sixtieth year; illness or other unavoidable circumstances; entry into another family through marriage; and desire to resign on the part of a female head of a house. Of these reasons the commonest is obviously old age. It was an ancient Chinese custom for the chief of a family to yield his place to his children or to resign his official post because

of senility. That the article in the Japanese *ryō* of 718: "Officials may retire after seventy years of age," was of Chinese origin is evidenced by the statement in the *Chou li*: "[A man of] seventy years is called old [*lao*], and transmits [his place to another person]," and by that in the *T'ang liu tien*: "Officials in active service . . . shall resign after seventy years of age, but may be permitted to serve if their faculties are still unimpaired." This Chinese custom, combined with the Japanese institutions of the family and the clan, was the basis of the system whereby the chief of a clan or family yielded his position to his heirs. Furthermore when it was applied to the feudalism which subsequently achieved an independent growth in Japan, it gradually became customary for the leader of a great family of warriors who had lost his military prowess because of old age to transfer the exclusive right to the military command and the feudal possessions of the family to his heir, as a rule to the eldest son. The present system of *inkyō* is the transmission for specified reasons of the rights of the head of the house, which are the survival of the rights of the head of the feudal family, to the first legal presumptive heir, still as a rule the eldest child. The *inkyō* as defined in the present civil code (bk. iv, chs. ii, v; bk. v, chs. i-iv) may therefore be regarded if not as an original at least as a native institution of Japan.

The right of *iriai*, which literally means common entry, refers to the communal use of land. The present civil law distinguishes communal rights in land which have the character of joint ownership from those which have not; it applies to the former the provisions of the law of joint ownership, to the latter those of the law of servitudes and requires that in either case local custom be followed primarily. It is clear that the content of such rights may be traced to the local customs which have continued from the Tokugawa period (after 1600). While these customs vary, they have a common characteristic in that where they obtain the inhabitants of a community may together enjoy a sort of right in rem to gather fuel, fodder or grass from land held by the community itself, by another community or by an individual. This right resembles joint ownership; it does not, however, involve the notion of individual shares as do some joint ownerships, being similar rather to the collective ownership (*Gesamteigentum*) of the Germanic law. According to the *ryō* of 718, which imitated the Chinese law, "The benefits of mountains and rivers, bushes and marshes, are common to

the public and to private [individuals]"; that is, the usufruct of uncultivated woods and plains was abandoned to the *iriai* of the people. But it would be rash to attribute the origin of the right of *iriai* to Chinese law. The ancient Japanese village community was generally composed of persons of the same clan, who from very early times enjoyed the usufruct of nearby woods or plains owned in common by the clan; the rule cited in the *ryō* was nothing more than a translation of this native custom into Chinese phraseology, and the system of *iriai* is an example of the pure survival of the native Japanese law.

Mujin, which refers to cooperative insurance, is described in the present law specially enacted in 1915; according to this law a company formed for this purpose determines the number of shares and the sum of money to be paid out per share, the members paying periodical contributions and receiving by lot or by other methods the sum for each share. The custom is sometimes called *tanomoshi* (literally, hopeful), and through this term its origin can be traced back directly to the Kamakura period; a document of 1275 from the monastery of Kōyasan referring to *tanomoshi* is the first recorded evidence of it. *Mujin*, which was originally a form of credit association, was widely prevalent among the people organized around Buddhist institutions; and during the Tokugawa period it gave rise to a species of lottery known as *torinoki mujin*, which may be translated vulgarly as a "get-away" *mujin*, for only those members who were lucky enough to draw particular lots received the sum of the share and escaped the payment of the contributions otherwise due. Another development of the *mujin* during the Tokugawa period was a sort of life insurance called *mujō-kō* (literally, a society formed in view of the impermanence of life), in which the payment of a sum by the society was conditioned not by lot but by the death of a member. In China and Korea there exist similar customs, so that the origin of the *mujin* may possibly be foreign; but it is obvious that its present forms in Japan are the results of native development.

By the decree of *sekifu* (literally, committing to responsibility) the judge presiding at the preliminary examination or the court of public trial charges the relatives or friends of a suspected person to guard him and to present him to the court when summoned, thereby suspending the effect of the warrant of detention. The *sekifu* differs from liberation on bail (*hoshaku*) in that the former is an official order and is not like the

latter granted on application of the accused or of his legal representative. The system originated during the Tokugawa period, when a suspect was often committed to the care and custody of the village or of the "five-house" group to which he belonged. The desire to prevent his escape not by means of a pecuniary fine but by an appeal to the sense of duty and humanity of the members of the family reflects the peculiar character of the Japanese family organization.

MASAJIRO TAKIKAWA

HINDU. Hindu law is older than any other existing legal system except perhaps the Jewish and today its *statut personnel* governs more than 230,000,000 people, an eighth of the human race; systems derived from it govern millions more. For three thousand years its outstanding characteristics have been the freedom of juristic discussion and the wealth and variety of custom. In the present article many branches of the law now obsolete but of interest to scholars must be left untouched. Fortunately the portions of Hindu law which are still vigorous are also the most characteristic.

The word *dharma*(n), the nearest Sanskrit equivalent for law, or *jus*, is the passive noun from the intensive form of the root *dhr*, to support, cherish or maintain, and means literally "that which is strongly supported"; i.e. custom. This primary significance it never wholly loses; but by a metonymy of which there are already traces in the *Rigveda* the word came to be used in an active sense as "that which supports or maintains," the foundation; and a *Śruti* writer says that *dharma* upholds the entire world. In this sense everything, animate or inanimate, has its peculiar *dharma*. It is the *dharma*, the essential function, of a stone to be hard, of fire to burn, of a tiger to be fierce, just as it is the *dharma* of a king to punish and to protect, of a Brahman to study and pray. Even the Gods are conceived as having their special *dharma*. Thus the word like Aristotle's conception of nature affords room for the multiplicity of species, including the differentiation of humanity. But since human beings are endowed with will power, there is possible for them a choice between *dharma*, conduct which establishes ("living according to one's nature"), and *adharma*, conduct leading to a man's undoing. Again the sentence of Aristotle comes to mind: "What each thing is when at its best, that we call its nature." From the standpoint of the commonwealth *dharma* is solidarity. *adharma* is anarchy. *Stare super antiquas vias* is

the supreme purpose of human nature, and all progress seems impossible. But the law never stood still: scope for change has always been admitted even by the most conservative, partly by reference to educated opinion, partly by the conception of the successive ages of mankind. Safeguards are necessary in the *kali yug* which were superfluous in the golden age; a theory of human degeneracy cloaks real reform.

Unlike its Greek counterpart the Hindu concept fell upon priestly soil. Ritual, both religious and magical, sacrament, penance and austerity bulk large in the law books. Divine revelation is a postulate. Sometimes the word *dharma* is used to include both revelation and observed custom and sometimes only the former in opposition to the latter. But the contradiction is more apparent than real, for the mental attitude of the Hindu seer (*rshi*) was more akin to that of a modern man of science than to that of a Semitic prophet. He regarded revelation not as a wind which bloweth where it listeth but as the answer to prolonged ascetic study, and he sought to know not only what ought to be but first what is. It is no accident that the *Manusmṛti* opens with a cosmogony nor that writers catalogue, often without adverse comment, practises contrary to the tenor of their teaching; e.g. in the lists of the eight forms of marriage and of the twelve kinds of sons. But bad customs, although duly catalogued, are not *dharma*; the sources of *dharma* are the *śruti* and the *smṛti*, the practise of good men (*sadacher*; elsewhere called *śistachar*, the practise of educated men) and that which is acceptable to one's own soul. The individual conscience and the public opinion of what may fairly be called the university group are sources of revelation.

Finally, *dharma* has a restricted sense in which it applies only to the religious custom of the twice born castes; that is to say, those superior castes (originating, as the texts show, with the fair skinned, fair haired and fair eyed Aryan invaders) who practise a sacrament of spiritual regeneration. The custom of merchants in commercial cases, the usages of a newly conquered territory, are to be scrupulously observed even though they are not *dharma* in this narrow sense, provided they are not repugnant to *dharma* in the sense of public morality.

Two consequences follow from this conception of law. (1) Law is personal and hereditary, not territorial. At the present day a Bengali who migrates to the Punjab or a Madras who settles in Bengal takes his personal law with him, and

families continue to observe amid another system the law derived from ancestors who migrated hundreds of years before. Moreover caste custom or local custom may always override the general body of the law. (2) The tribunals by which law is normally enforced are private tribunals, those of the family, trade or profession, caste or community whose particular *dharma* is involved; the state courts are courts of last resort. This peculiarity disappeared on the establishment of British courts. Of such private tribunals only caste panchayats remain, and they function only in the internal affairs of the caste; but through the long period of Moslem domination these private courts facilitated the continuity of Hindu law at the same time that they fostered the immense growth of custom. The revival of panchayats has been a favorite idea of reformers in recent years.

Apart from caste (*q.v.*) the most characteristic of Hindu legal institutions is the joint family. Traces of this can be found in most branches of the Aryan race, but it received its fullest development in India. It has always been strongly patriarchal and agnatic, the matrilineal system of the Malabar Nairs being a purely local and insignificant exception. Of the joint family there are in law two widely different conceptions (see JIMŪTAVĀHANA; VIJÑANESVĀRA); but so long as mutual trust continues, the economic and social working of both systems is the same. Reverence for the father is as great elsewhere as in Bengal; nor does the Bengali father fail to consult his adult sons. A joint family consists of a father and his sons, or of the male agnate descendants by birth or adoption of a common male ancestor, with the wives and unmarried daughters dependent upon them. In the case of a trading family it may happen that one brother is managing a branch in Rangoon, another in Delhi and a third in Nairobi, while the original home may be somewhere in the Rajputana deserts. But however widely separated, they have a common home where the family worship (in those castes which practise family worship) is maintained, and when together the men of the family have a common table. All revenues are carried to and all expenses paid out of a common fund. Until the moment of partition there can be no question of a member earning less or spending more than his share: partition is the safety valve and from the earliest law books onward the prescriptions about it are numerous and detailed.

The question whether individual or group ownership is the older is an unprofitable one, for

in early times the two conceptions are inextricable: every joint family springs from the personality of an individual founder. But the Hindu law books connect the idea of joint property preeminently with land; one may compare the agricultural connotation of the Roman familia; the pastoral patriarch was an individualist.

Sacramental marriage, akin to the Roman *confarreatio* and probably monogamous in origin, dates from Vedic times. The wife, *patni*, stands beside her husband, *pati*, at the family sacrifices, which he cannot celebrate without her assistance; and in the Vedic marriage ritual he promises to respect her economic liberty. This sacramental idea nevertheless involves the merger of the wife's personality in the husband. Widow remarriage is impossible; but the self-immolation of the *sati* (suttee) although ancient was never general, and compulsory *sati* was based on a misreading of the texts.

But a baser conception of the legal position of women is also very ancient. The primary religious duty of every Hindu to have a son becomes obscured in early times by the economic advantage of every man to have as many sons as possible, and women are merely a means to that end. Woman must be married in childhood so that her fruitfulness may be exploited to the utmost. A famous text of Manu assimilates sons and wives to slaves, and another declares the perpetual dependence of woman. Marriage by purchase, capture and fraud; concubinage, the levirate, directions to a wife to raise up seed by another man, these things are duly catalogued in the *smṛtis*. It is to the credit of their writers that they managed on the whole to discountenance the worst abuses. Today of these lower forms marriage by purchase alone survives and although common in some classes is reprobated at least for the twice born castes. Divorce is impossible save by rare caste custom among Sudras: many Sudra castes have always permitted widow remarriage. Polygamy is universally legal, but monogamy is more common and there is some authority for saying that a second wife is justifiable only where the first wife remains sonless; even then a gift on supersession is recommended. The property rights of women—in contrast with the Vedic text—are almost confined to personal and household goods and to the limited estate of a widow as the surviving half of her husband's body. In the joint family (save rarely in Bengal) women are only dependents. Reformers, however, may draw an armory of texts from ancient sources.

Brahman family life is built up around a duty of oblation to the manes of departed ancestors. The head of the family in each generation, accompanied by his wife, must offer cakes of wheat, rice or millet (according to the locality) to three generations of his agnate ancestors and three generations of the agnate ancestors of his mother and smaller offerings to more remote forbears. Continuity is a religious duty and if a man cannot get a child by normal means he should adopt one, for a son, *putra* (according to a false etymology in Manu), saves his father's soul from hell (*put*). Legal doctrines based on this religious theory have been applied to fetter the liberty of castes who never held the theory; and the curious and nowadays common practise of adoption by a widow to her dead husband is based upon it.

History is an exotic science on Hindu soil, and there is not a date until recent times nor even a personality in the legal history of India which is not disputed among scholars. Four periods, however, are distinguished. The first is the period of the *śruti*, literally of "things heard"; i.e. of the *Vedas* and other writings, regarded as the voice of God. Although not juristic these contain scattered legal matter from which the social life and polity of the primitive Aryans can be to some extent reconstructed. Folk custom is seen hardening into a series of sacerdotal prescriptions. The second period is that of the *smṛti*, literally of "things remembered." This word (implying divine revelation in substance without textual inspiration) is used in two senses: in the wider it includes all ancient Sanskrit writings other than those enumerated above; in the narrower it is used of the ancient works on *dharma* only, of which there are probably about a hundred still extant. The more important, about twenty in number, have been wholly or partly translated. The earliest are probably contemporary with the latest Upanishads; they are the work of a period when the Hindu mind had already attained the highest refinement in metaphysical speculation. There is nothing in extant Hindu law corresponding to such codes as the *Lex salica* or even the Twelve Tables.

There are three classes of legal treatises of this period. (1) The *Dharmasūtras* are the oldest manifestation of definite schools of law, or rather they embody (in the form of mnemonic aphorisms) the law teaching given in particular Vedic schools. With one exception, which professes to emanate from a god, each of them bears the name of some great sage of the preceding period, implying thereby that it was the accepted

doctrine of the school which carried on his teaching. They embody in the main the law of a period anterior to the triumph of Buddhism although only partly anterior to the Buddha, the probable dates being from about 600 B.C. for the earliest down to about 300 B.C. Of rules which are still a vital part of the law the widow's rights of inheritance are based on a text of Baudhāyana and important rules on adoption are taken from Vasiṣṭha. (2) The next stage of legal evolution provides the *Arthasāstras*, or books of secular administration as distinct from religious law. Of these the most important is the *Arthasāstra* of Kautilya, which professes to be the work of the prime minister of Chandragupta, the first Maurya emperor, and, if this profession is correct, must date from his reign, 321-296 B.C. Like nearly everything else in Sanskrit chronology the date and ascription are vigorously disputed, but unquestionably the work embodies the policy of a ruling class in a highly organized state. Such a class, once it has achieved the objects which brought it to power, is always conservative. The *arthasāstra* accordingly insists on the duty of the king to uphold the *dharma* of the various castes, although it ranks royal command as superior to *dharma*, a view from which of course the religious writers emphatically dissent. The value of the *arthasāstra* today is purely historical. (3) The term *śāstra*, connected with a root meaning to teach, is correctly translated as institutes and incorrectly but frequently as codes of law. *Dharmaśāstra* in its broadest sense covers all Sanskrit writings on religious law, including both the *dharmaśūtras* and the later digests and commentaries. Strictly, it is synonymous with *smṛti* in its purely legal connotation; more narrowly still, it connotes only those later *smṛti* works on *dharma* which are couched in verse. These probably date from the overthrow of Buddhism and reestablishment of Brahman supremacy, with which the two most important of them, the institutes of Manu and Yājñavalkya, are connected. These two are accepted as of universal authority in Hinduism.

The name Manu for the primeval lawgiver and father of mankind has a history going back to the *Rigveda*. Such a personage is of course entirely mythical, but from very early times there seems to have been a body of law recognized as of greatest authority and quoted with submission by *śruti* and *sūtra* writers as that of Manu. What that body of law was—whether floating tradition or the teachings of a single school or various earlier editions of the existing work—

and what was its relation to the existing work are questions of great obscurity. Scholars incline to place the date of the *Manusmṛti* as it exists today in the first century A.D., although it may be perhaps two hundred years earlier. Its orthodoxy connects it with the Brahman counter-reformation, and it has been plausibly suggested that one passage is inspired by the usurpation of Puṣyamitra Sunga in 184 B.C. Even as it stands, however, the *Manusmṛti* contains matter obviously of widely different periods and prescriptions which it is quite impossible to reconcile with one another.

A great colonizing movement beginning before the Christian era and originating mainly from central and southern India carried Indian civilization overseas to Burma, Siam, Cambodia, Annam, Sumatra, Java and the Malay Archipelago. In all these countries a distinctively Brahmanical civilization was established; Buddhism was a later arrival. It seems a reasonable although by no means a certain inference that the foundations were laid before Buddhism became a dominant force in India or else by exiles who disliked and fled from it as the Pilgrim Fathers fled from the Church of England. The existing *Manusmṛti* disapproves of oversea voyages; one who takes part in them is not allowed to be present at family sacrifices; i.e. is outcasted. But throughout the farther East Manu is the name of the founder of law. Manu law books are known to have existed as far afield as Java and Bali. Sanskrit inscriptions in Cambodia are either literal quotations from or based upon Manu, and there is still a Brahman priesthood. In Burma in particular there has been a series of *Manu dhammathats* lasting over centuries, the earliest of which is identical in form and to some extent also in substance with the *Manusmṛti*; in later times the name Manu became a title which was given to juristic writers of exceptional eminence.

Part of the Hindu civilization of the farther East was overrun by Buddhism and part by Islam. In any case the law, so far as it survived, had a separate growth and history and has diverged widely from Hindu law. So-called Burmese Buddhist law at the present day reveals its ancestry not only by the Manu tradition but by its vocabulary, which is borrowed from the Sanskrit; but although a few isolated rules are retained, the definitions of identical terms and the juristic conceptions have been altered. In particular birthrights are unknown and the joint family of Hindu law, on which the wife was

dependent, has given place to a *societas* between husband and wife. The *Yājñavalkyasmṛti* comes probably three to four hundred years later in date than the *Manusmṛti* and has not been carried to the farther East, a fact which helps to date the severance of oversea Hinduism from the main stock. Nevertheless, isolated rules from *Yājñavalkya* and even from later *smṛtis* are traceable in far eastern systems, notably in Java. Although second in popular reverence to the *Manusmṛti* on which it is based, it is more important; both because it represents a liberal recension of Manu and because it is the basis of most of the work of the succeeding period, especially of the *Mitākshara*. The *smṛti* of Nārada is the last work of this period.

The third period of Hindu legal history is that of the commentators and digest writers (c. 800–1800 A.D.). The first half of this period was the Antonine age of Hindu law. No longer claiming divine authority for themselves writers in countries as yet unshaken by the Moslem invasion undertook the task of evolving a *corpus juris*. Professing absolute submission they could not reconcile the mutual contradictions of the *smṛti* writers; under the guise of exegesis they allowed themselves considerable freedom of legislative amendment. Professing to explain they not only explain away but also rebuild. The two greatest are Vijñānesvāra, author of the *Mitākshara*, and Jīmūtavāhana, author of the *Dāyabhāga*; and India is to this day divided in allegiance between them. Devaṇṇa Bhaṭṭa, a Telugu Brahman, author of the *Smṛti Chandrika*, also deserves mention.

During the latter part of this period Islam was dominant over the greater part of India. Although a somewhat fanciful parallel between *fiqh* and *dharma* is possible (for both are ethico-legal conceptions), yet with the domestic character of Hindu tribunals and the Gallic attitude of Islam to the laws of subject races contact between the two systems was purely external and hardened their natural conservatism. A few great names arise in this later period, notably Nilkantha Bhaṭṭa, whose *Vyavahāra Mayūkha* is the prevailing authority in Gujarat. There was a flourishing fifteenth century school of law in Mithila (Bihar) and there were eminent writers in Bengal, Benares and elsewhere. The worst tendencies of the period to pedantry and divorce from practical life are exemplified in Nanda Paṇḍita of Benares, whose work on adoption (*Dattaka Mimamsa*) has unfortunately become the leading authority.

The association of Jagannath Tarkapanchanan and Colebrooke in compiling and translating the last of the great Sanskrit digests in 1797 fittingly marks the transition to the next period of Hindu legal history, in which Hindu law came under the influence of English law. This influence is comparable to that exercised by Greek philosophy over Roman law or by Roman law over English law and had its origin not only in the preconceptions with which English lawyers approached Indian problems but also in the admiration which was felt by Hindus for the English system as well as for the liberty which it fostered.

Of English preconceptions the most important was perhaps that of law as a single system. This limited the scope of Hindu law to matters affecting Hindus only, in practise the *statut personnel* and a few other rules. It also reduced the caste tribunals (panchayats) to a position resembling that of club committees or trade unions in England. Coming from a country in which all legal authority had for centuries been exercised by a small centralized body of judges and barristers, early English judges in India not unnaturally supposed that the leading *smṛtis* and commentaries, universally quoted with reverence, enjoyed an authority comparable to the English statute book and law reports. Even the famous dictum of the Privy Council in 1868 that “under the Hindu system clear proof of usage outweighs the written text of the law” enshrines the very mistake which it corrects. There is no “written text of the law”; there are only authoritative treatises on an unwritten law. The same tendency to unification, healthy in the main, was fostered by the fact that at first only a small portion of the Sanskrit legal literature was translated; the courts inevitably exaggerated the authority of that which was available to them. In particular the *Dattaka Mimamsa* above mentioned and another late treatise (in its present form probably a forgery) have become the basis of a highly artificial and unsatisfactory law of adoption to the exclusion of more valuable material. Again, this unifying instinct has strengthened the Brahman tendency to apply religious theories peculiar to the twice born castes to legal problems of Sudras, outcastes, aborigines. The incongruity, however, is more apparent than real; for such classes as they rise in the social scale copy the best that is known to them and the theories in question only give artificial form to practises (e.g. agnate succession, adoption, patriarchal power, family solidarity) common

even in communities where such theories are unknown. But in some parts, notably in the Punjab and Malabar, custom has been too stubborn for any unification. The English doctrine of judicial precedent has found a congenial soil in Hindu law. In general this also has led to unity and certainty. But differences of opinion between various high courts as to the importation of English rules have produced cleavages which did not previously exist. The most famous is on the question whether one member of a *Mitākshara* joint family can alienate his share for value without the others' consent. In those high courts where such alienation is recognized it is so only where it can be brought within the equity by which an English purchaser for value may claim to stand in his vender's shoes and take over his remedies. This exemplifies the fact that English equity doctrines have been acclimatized far more frequently than the doctrines of the common law. In some cases parallels have been discovered in the Sanskrit texts; in others "those principles of law common to all systems," or "justice, equity and good conscience," have been invoked. But so numerous are the rules transplanted that it is impossible today to understand Hindu law without a knowledge of English equity jurisprudence. The most striking importation of English ideas to satisfy purely Hindu wishes is the will making power. Before the British advent in India wills were unknown to Hindu law. There is now a large and complicated Hindu law on the subject built up mainly of English materials. English judges have attempted to check its growth by reference to the ancient Hindu law of gifts, but the only result has been to exemplify another importation from England, to which Hindus increasingly turn; namely, the use of legislation as an engine of law reform. The modern Hindu lawyer, regarding his ancient law with patriotic pride, looks upon English law also with possessory affection. He would not separate even if he could the two systems of which he is the living synthesis, and in adapting his inherited conceptions to the needs of today he is merely doing openly and with modern tools what in another age and in another fashion was done by the sages and commentators before him, above all by Vijñānesvāra.

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See: CRIMINAL LAW; CRIME; CRIMINOLOGY; PUNISHMENT; LEGISLATION; CODIFICATION; PUBLIC LAW; ADMINISTRATIVE LAW; CONSTITUTIONAL LAW; FAMILY LAW; COMMERCIAL LAW; MARITIME LAW; CONFLICT OF LAWS; INTERNATIONAL LAW; JURISPRUDENCE; JUS-

TICE, ADMINISTRATION OF; COURTS; JUDICIARY; LEGAL PROFESSION AND LEGAL EDUCATION; PROCEDURE, LEGAL; PROPERTY; OWNERSHIP; POSSESSION; SUCCESSION, LAWS OF; MARRIAGE; DIVORCE.

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LAW ENFORCEMENT, while it may refer to the process by which public order is maintained, refers more significantly to a public attitude or ideal of government. It is the purpose here to deal not with the myriad processes of enforcing laws (see JUSTICE, ADMINISTRATION OF) but with the idealized concept of law enforcement which occupies such a prominent place in the recent legal and political literature. In a sense the notion of law enforcement is inseparable from law, because no law is passed without some expectation of enforced obedience. Yet by imperceptible gradation the emphasis is often changed from the social purpose or the merits of the rule itself to the notion that the prestige of government depends on its enforcement; and enforcement becomes directed not to serving public safety or convenience but to justifying a moral attitude toward law regardless of public convenience. Arising at first from a real necessity for enforcement, the ideal of law enforcement tends to grow mystical and abstract and has progressively less to do with actual enforcement.

The laws to which the creed of law enforcement attaches itself are not necessarily those of the greatest social significance. It is notably absent in so-called civil cases, including such important fields as negligence, breach of contract, public utilities, rate making and corporate mergers. Attorneys who contrive devices for avoiding the consequences of these laws maintain positions of impregnable respectability. Yet the prestige of the state might logically be more involved in the enforcement of such laws than in

the incarceration of an occasional bootlegger. The creed attaches also as a rule to laws which not only are not enforced but which are in the social situation difficult of enforcement. Thus the enforcement of rules requiring chastity of priests in the Middle Ages, forbidding card playing in the Methodist church and prohibiting the sale of intoxicating liquor in the United States is clothed with an emotional importance which increases as the laws are ignored. In the process of emotional construction laws and penalties are heaped on one another, appeals are made to civic consciousness, oratory is added to reason, with an intensity of feeling that allows more significant social problems to be obscured.

The problem of criminal administration presents two aspects—the keeping of order in the community and the dramatization of the moral notions of the community. The first is primarily a problem for the police and the system of prosecution and is little overlaid with moral and emotional considerations. In fact the quality of the economic system and its impact on individuals are probably more important in preserving order than any system of criminal law. The honest prosecutor, except for the occasional fanatic, is necessarily more concerned with the suppression of dangerous individuals than with law enforcement as an end in itself. To him the criminal code is a very practical assortment of weapons, and the fact that there exist more laws than he can ever enforce does not greatly trouble him. Unimportant offenders are speedily disposed of by the offer of inducements to plead guilty. The important criminal against whom insufficient evidence exists may be sentenced for the suspected offense under some other law; or he may be induced to plead guilty on a compromise basis because he is ignorant of the strength of the case against him. The first object of the prosecutor is to put him behind bars. The ideal of law enforcement, with its distrust of "bargains," its demand for uniform sentences and its emphasis on laws rather than individuals, is pushed into the background when the practical concern is one of public safety.

The second aspect of criminal law administration is its role in dramatizing the moral notions of the community. It is here that the courts find their chief function and the ideal of law enforcement is most operative. The trial of "Al" Capone, against whom no sufficient evidence of racketeering had been found and who was sentenced under a tax measure, was hailed throughout the United States as a triumph of

law enforcement. Everyone felt better because of the emotional significance of the vindication of "law." In the same way, when the conviction of an admitted whisky ring, against which ample evidence existed, was reversed by the United States Supreme Court on the ground of unreasonable search, the ideal of individual freedom from governmental tyranny was dramatized.

The ideal of law enforcement as it has become a part of the contemporary political consciousness may be stated somewhat as follows: laws (particularly criminal laws) are sacred; whatever their social consequences or by whatever political methods they have been passed, they must be respected and enforced until repealed; they must be respected that they may be enforced and enforced that they may be respected; non-enforcement of any law leads to a disrespect for all laws, which in turn leads to non-enforcement of all laws. This reasoning is constantly molding attitudes toward criminal administration and its reform. In the struggle over prohibition in the United States it has compelled even the opponents of the law to demand enforcement. A politician who would publicly advocate disregarding or relaxing any law would by common consent be endangering the structure of government.

One of the results of the attitude is the prevalent opinion that there are too many laws. There were 14,872 sections in the Missouri Revised Statutes of 1931; 17,875 in Michigan in 1929, 15,367 in Ohio and nine volumes in the New York Consolidated Laws. Obviously not all these sections can be enforced, but the improbability of enforcement seems to inspire a vague terror. Codes are often revised, but the revisions usually find some use for everything, and the intellectual method is not that of expurgation but of reconciliation—always a wordy process; as a result criminal codes appear to be increasing in size rather than diminishing. Actually they tend to be palimpsests consisting of one law written over another, with nothing ever repealed, since they represent moral attitudes which have a way of persisting long after they are in direct conflict with behavior.

A second important effect of the unexamined assumptions back of the concept of law enforcement is found in the contradictions in which it involves the rhetoric and the actualities of the judicial system. Thus the courts enforce the criminal law, and therefore the verbal content of criminal law and procedure is deemed of the utmost importance to public order; actually the

courts have only a minor part in the maintenance of public order, judged from the small percentage of cases which reach them. Again, criminal law is looked upon as a body of generally known rules which guide the ordinary citizen in his conduct; actually substantive criminal law may be most significantly seen as an arsenal of weapons to be used against such persons as the prosecuting officer may deem a menace to public safety. Again, it is considered the duty of the prosecutor to enforce all criminal laws regardless of his own judgment about public policy, since compromises may lead to disrespect for law; actually it is the larger duty of the prosecutor to solve the problem of public order, using the criminal code as an instrument rather than a set of commands; this makes it proper and necessary that he should enforce some laws, partially enforce others and ignore still others according to his best judgment. Finally, the bargaining process by which lighter sentences are traded for pleas of guilty is regarded as contrary to the ideals of criminal justice; actually criminal cases should be frankly compromised at the discretion of the prosecutor, since it is possible to try only a small proportion of criminal offenders and the method of compromise assists in the speedy disposition of minor cases and the punishment of important criminals against whom formal evidence is lacking. To these typical contradictions may be added others: the conflict between the law enforcement ideal of uniformity of sentences and the social desirability of individualized treatment of criminals; and the general conflict between standards of speed and number of convictions as tests of efficiency in prosecution, and the fact that a wise discretion might invoke a very large number of dismissals.

This conflict between the ideal of law enforcement and the demands of realistic criminal administration compels the necessary compromises of criminal cases to be carried on *sub rosa*, while openly they are condemned. Criminal reform is thus futilely directed at the elimination of "bargain days" in court (when large numbers of unimportant small offenders are given approximately what they deserve) on the theory that if such cases were more relentlessly tried some good would come of it. The prosecutor is also placed under the necessity of appearing to enforce all laws at once. Often he may be compelled by outside agencies actually to attempt to enforce laws which promote dissension and disorder rather than public security. The philosophy of law enforcement permits him to make

no selection of laws, while the necessities of the situation compel him to use a discretion only sporadically controlled by the zeal of outsiders. And when the ideal of law enforcement conflicts with older ideals no less tenaciously held, particularly that of individual freedom from governmental encroachment, the moral choice grows highly complicated.

The causes for the pervasive influence of the law enforcement ideal in the United States must be sought in the constitutional traditions of the country and in its social development. Back of it lies the English constitutional struggle in which the Parliament strove to subordinate the king to law and thereby invested law for the English speaking world with a sanctity which it has never entirely lost. Despite the lawless basis of the American Revolution and even of the constitution the idea regained its force once the new policy was established. Andrew Jackson in handling the threat of secession by South Carolina chose wisely not to talk about the highly debatable question of secession but to take his stand on the unquestioned assumption that "nullification" was an evil. The phrase had magic in it and was deeply burned into American consciousness by the Civil War. It furnished an apt ideological basis for the enforcement of the prohibition law, pointing the moral that unless all laws are enforced the governmental structure will totter. Finally, support for the doctrine was drawn from the fear of the invasion of immigrant groups with their lawless traditions and institutions, felt by the "native" element in the population.

Perhaps a different ideology concerning the criminal problems may be seeping into public consciousness with the notion that the problem of crime is that of the maladjusted individual rather than that of the unenforced law. Yet this notion has still a long struggle before it with the conflicting ideal that we must enforce laws in order that laws may be enforced or else face anarchy.

THURMAN ARNOLD

See: LAWLESSNESS; CONSTITUTIONALISM; JUSTICE, ADMINISTRATION OF; PROCEDURE, LEGAL; PROSECUTION; POLICE; PROHIBITION; SUMPTUARY LEGISLATION; BLUE LAWS.

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LAW, JOHN (1671-1729), Scotch monetary theorist and financier. Law was born in Edinburgh. His life was extraordinary and his work marks a turning point in the evolution of monetary doctrines. The son of a goldsmith and active in all the controversies arising in England at the time of the creation of the Bank of England in 1694, he elaborated many projects which he strove to have executed in various countries—England, Scotland, Austria, the Italian states, France.

His doctrine was inspired in part by the work of various English publicists, such as Locke, Petty, Mun, Davenant, Barbon and North, and in part by the general economic condition of western Europe, especially France, at the end of the seventeenth century and the beginning of the eighteenth. A mercantilist, Law sought before all else the development of the wealth and power of the state. Land, natural and industrial products and the inhabitants constitute the essential wealth of a country but these elements "depend on commerce and commerce depends on specie," which consists of the precious metals. As the latter are relatively rare he conceived the scheme of substituting for metallic currency paper money, which can be created at will and more easily transported, the cost of which is insignificant and the circulation much freer. The paper currency would be secured, for example, by the value of a nation's land and circulated by means of a public bank which would accept it and convert it eventually into specie. As the value of money does not result from its intrinsic nature but from the uses to which it is put, the public would gradually become accustomed to this new money and would desire no other; the bank would then be able to extend its activities—for example, to redeem the public debt by engaging in profitable commercial operations in the colonies and the like.

In 1716 Law finally succeeded in winning the French government to his project and there con-

sequently took place the creation of the Banque Générale and of the Compagnie d'Occident in 1717 (enlarged in 1719 into the Compagnie des Indes), the fusion of the two institutions, the accession of Law to the general control of finances and the issue of nearly three billion notes to accomplish the redemption of the public debt in 1719-20. After four years of brilliant success the system encountered a lack of confidence, engendered by the overexpansion of the company's activities, the increase in the issue of paper and the excessive haste with which Law wished to remold the political, economic and social structure of France. In less than a year the system broke down, resulting in the ruin of numerous individual speculators but having nevertheless reduced the burden of the debt service and leaving behind it a shipping company of 105 vessels and grandiose colonial prospects.

Although he was obliged to flee in 1720 Law did not lose courage; he multiplied his writings in defense of his conceptions and was about to be recalled to the financial administration of France when the regent, his protector, died in 1723. He then retired to Venice, where he died in straitened circumstances.

PAUL HARSIN

Consult: Wiston-Glynn, A. W., *John Law of Lauriston* (Edinburgh 1907); Cayla, P., *Les théories de Law* (Paris 1909); Harsin, P., *Doctrines monétaires et financières en France du XVI^e au XVIII^e siècle* (Paris 1928) p. 115-210, and *Étude critique sur la bibliographie des oeuvres de John Law* (Liège 1928); Mann, K. F., "Die Vorgeschichte des Finanzsystems von John Law" in *Schmollers Jahrbuch*, vol. xxxvii (1913) 1165-1229, and "Der politische Ideengehalt von John Laws Finanzsystem" in *Jahrbücher für Nationalökonomie und Statistik*, 3rd ser., vol. lviii (1919) 97-122; Rohrbach, R., *Die geld- und kredittheoretischen Anschauungen John Laws*, Volkswirtschaftliche Studien, no. 18 (Berlin 1927); Strub, O., *Law's Handels- und Kolonialpolitik*, Züricher volkswirtschaftliche Studien, no. 7 (Zurich 1913); Di Gennaro, M., *Giovanni Law e l'opera sua* (Naples 1931).

LAW MERCHANT is a branch of the law once applicable to the affairs of a particular class of individuals, merchants, and subsequently extended in England and in America to commercial transactions generally. The body of legal rules which is called the law merchant is historically the most ancient in the modern law, so that knowledge of its history in mediaeval and to some extent in ancient times is essential to the comprehension of modern commercial law. In ancient Egypt contracts of sale and loans followed customary and general business forms; likewise in Babylon there were established legal

forms for documents, which were carefully preserved. In ancient Greece the commercial law was—as also later, in the Middle Ages—unwritten and customary; foreign merchants were under no legal disability; contracts were informal; banking and exchange appeared; commercial paper payable to bearer and to order was not unknown; customary rates of interest were established; and there was a limited amount of agency. At Alexandria many of what were once considered to be features of the mediaeval law were in existence; the right to pursue an occupation was confined to the members of a guild which had its own statutes, its own court and a special commercial code; its members abroad were grouped into specially privileged bodies, lived under their home laws and were governed by their own directors.

To this considerable and developed body of the law Rome fell heir, but with one notable difference. Of all the fully developed legal systems of the world only the Roman and the English possessed no separately organized mercantile tribunals, no distinct codes of commercial law, but developed and administered the commercial law as a branch of the general law.

But the more ancient mercantile rules were perfected by the Roman experience, and the results were summed up and codified by Justinian. This legacy was inherited by the later Roman, or Byzantine, Empire, to a lesser extent by the barbarian kingdoms and ultimately by the mediaeval cities. Even in western Europe, as the *Lex visigothorum* shows, foreign merchants were for long governed by their own laws and their causes were tried before their own judges; the merchants of Merovingian France were in commercial relationship with most of the other Mediterranean countries. In 796 Charlemagne wrote to Offa, king of Mercia, requesting protection for his own merchants and promising it reciprocally to Mercian merchants "according to the ancient custom of commerce."

At the eastern end of the Mediterranean the later Roman Empire was for many centuries enterprising, wealthy and powerful; and the existing body of Roman law continued in force without demonstrable evidence of any break. But in addition to this law a new influence, the power of custom, was in the making. As early as 540 the eastern prefect by order of Justinian assembled the captains concerned in maritime loans in order to ascertain what the current customs then were. After this time the influence of legislation, never great, practically disappeared

and the influence of custom came to the fore and was thenceforth the means by which the commercial law developed. Even in Justinian's time the commercial interests began to obtain the restoration of a special status. The tradespeople or a certain class of them, especially the bankers at Constantinople, were exempted from the provisions of the new imperial laws; and an extended special jurisdiction of the officially appointed directors of the commercial corporations existed. In this way there came to be a special law for those engaged in mercantile and industrial occupations. Behind Justinian's code there undoubtedly existed not only this special law but also provincial and local customary laws, which together with actual commercial usages must have been ultimately handed down to the Middle Ages. Even the codes underwent some modification by custom. The Rhodian Sea Law, probably an eighth century compilation from earlier materials, shows new maritime usages arising out of new needs pertaining to losses at sea and insurance. Little by little a commercial maritime law was formed, governed by its own rules; because of these customary modifications it was distinct from the classical civil law.

The close connection between Italy and the later Roman Empire has not been sufficiently appreciated by legal historians. From the re-establishment of Roman authority in Italy in the reign of Justinian the relations both political and commercial of Italy with the empire continued with but slight interruptions until the ultimate fall of the empire in 1453. By this close and nearly constant connection the continuity of the law was undoubtedly preserved, because the classical law, as modified by the customs of the later empire, must have been in force in the dependent Italian seaports until about the time of the final withdrawal of the imperial authority in 1071, which left the maritime cities of Italy legally free to develop their own commercial and maritime laws in their own way—the way of customary growth. It was in mediaeval Italy that commerce became important and there as elsewhere the maritime and commercial laws went hand in hand. In the south of Italy, where the imperial influence persisted longest, the earliest codes of maritime law were compiled. It is not to be wondered at therefore that codes of maritime law and commercial courts sprang up in Italy in the eleventh and twelfth centuries—as historical time goes, almost immediately after the officials of the empire had left the peninsula forever.

The corporations of arts and trades in the Italian cities had apparently survived painfully and obscurely to the period of the crises of the Dark Ages. In the tenth and eleventh centuries they united, controlled the governmental systems themselves and formed the independent city republic, the commune, governed by consuls. The *consules communi* first appeared at Pisa in 1087; they were apparently high corporation officials invested with many sorts of public duties and powers. This connection of the private corporation with the public official was never wholly lost. With the increase of commerce the *consules communi* could not fulfil both their administrative and judicial duties and the latter were delegated first to judiciary consuls and then to the *consules mercatorum*, who were at the same time the head of a guild. These consuls first appeared at Piacenza in 1154; by the end of the century they were established in practically every Italian city and almost immediately thereafter in the cities of southern France. At first each consul had jurisdiction only over the members of his own guild, and a member who withdrew from the guild could escape its jurisdiction. To obviate this a new court, the Mercanzia, was created at Florence and soon came to have jurisdiction over the members of all the guilds. In the endeavor to avoid the economic loss caused by the growing custom of reprisals its jurisdiction was about 1320 extended to foreigners and to citizens who were not members of a guild. This development was characteristic of all the Italian cities, so that before the middle of the fifteenth century these guild courts became courts peculiar to commercial causes. By that time the substantive law as to agency, powers of attorney, brokers, contracts, sales, partnership, primitive corporations, trademarks, bills of lading, warehouse receipts, negotiable instruments, insurance and reprisals was well developed; on the procedural side the law was summary, swiftly administered, almost free from appeals, equitable and not technical, and lawyers were not permitted to appear.

As the Italian merchants journeyed abroad they carried with them their own laws and institutions and were accompanied by a consul, as they preferred to be judged according to their own customs by one of their own countrymen. This right of colonial consular jurisdiction was sometimes granted by treaty and sometimes merely assumed as a matter of custom. It spread rapidly over southern Europe, Asia Minor and north Africa; it did not halt in Provence but ex-

tended to the northern fairs of Champagne, attended in great numbers by Italians and Provençals and where the Romance and Germanic laws and customs met and fused.

Heretofore the development of the main stream, Romance law, has been followed; now it must be shown how the Germanic law originated and flowed into the other stream. Today it is known that Rome did not "fall" in the popular sense but that there was a slow and insensible diminution of the imperial authority in the west. Under the barbarian rulers the Roman population in the west lived on under Roman law, and their legal documents were drawn according to the Roman forms. Commerce did not suddenly disappear but continued demonstrably in some volume into the seventh and eighth centuries. Undoubtedly, however, as western civilization slowly dwindled away, the business of the merchants became more difficult and more precarious. Violence became frequent and went unpunished; wars were continuous and justice was impossible. Merchants could find relief by only two methods: they could seek to control the governmental systems themselves (as in Italy and the south of France) or they could purchase special rights and privileges for themselves from the new monarchies (as in Germany and the north of France). The city-states and their guilds sprang from one method and the markets and fairs from the other: both worked for the same broad end.

The early laws of the new barbarian kingdoms created a special law for certain classes and a special jurisdiction before special judges for merchants. The procedure was swift. Safe conduct was likewise granted merchants on their travels. To assure this protection in an unsettled era and also to safeguard the rights of the king or of his concessionaire commerce in the north of Europe—no longer continuous but periodic—was concentrated in the fairs and markets, which became complete and autonomous administrative and judicial units. Where towns and markets coexisted, their officials, their courts and their law ultimately tended to become coterminous. The law of the market and the law of the merchants were identical and eventually became the law of the city. By the eleventh century a separate *jus mercatorium* had been built up in the markets upon the basis of custom and usage.

Of particular importance from the twelfth to the fourteenth century were the fairs of Champagne, for that province constituted a neutral market between Italy, Germany, the

Low Countries, France and England. The Italians attended these fairs in crowds and exercised an overwhelming influence. Not only did their consuls exercise jurisdiction over them, but there was also a general jurisdiction of special fair judges over all the merchants in attendance. Its procedure was summary, simple and equitable. No lawyers were allowed; adjournments, if any, were short; and after a summary questioning of the parties judgment was in most cases delivered at once. Execution followed without delay if the debtor or his property could be found within Champagne. If the debtor had fled, the guards of the fair at once addressed letters to the authorities of the jurisdiction in which he was to be found, demanding immediate execution. Neither negligence nor refusal was tolerated, the penalty for either being prohibition of the fairs. All the more important documents passed under the seal of the fair and thereafter had an absolute probative force. Sealed obligations were enforceable on the goods of the debtor for thirty years. In their heyday the fairs of Champagne were the clearing house of Europe, centers of banking and of exchange.

The development of the early English courts in which the law merchant was administered seems to have followed the general model of those in northern France and Germany. There were no great city republics in England; instead the towns were small, weak and dependent for their rights on charters secured from a strong monarch. Just as on the continent towns grew up about the markets and fairs, so to a lesser extent the same process went on in England. The markets particularly and the fairs generally were of considerable local and sometimes of regional but not usually of national or international importance. England in the Middle Ages lay off the main trade routes and was commercially backward. The larger transactions of foreign trade were in foreign hands; and royal privileges first, followed by their own organization later, kept the foreign merchants outside the local law. Just as elsewhere the members of each nationality kept to themselves and lived under their own laws administered by their own judges.

But English commerce steadily developed. In the twelfth century it was local; in the thirteenth it became more national; in the fourteenth it was just becoming international; in the fifteenth it was able successfully to attack the privileges of the foreign merchants. The closing of the old trade routes and the discovery of the New World put England on the main trade routes of the

world in the sixteenth century and consequently led to new legal developments.

The legal procedure of the smaller English market and fair and borough courts was like that on the continent; it was swift—from hour to hour and from tide to tide—summary and without technicality; greatest of all, the merchants themselves always had a share in the administration of the law extending beyond the question of procedure to the actual content of the law itself, which before the end of the thirteenth century was recognized as a special body of law peculiar to the merchants. It had to do with contracts, covenants, breaches of warranty, sales, debts and trespasses. Obligatory writings of debt although rare at first were not unknown. Every mercantile court had a clerk and a seal, and since it was a court of record it kept plea rolls. These courts, commonly known as courts of piepowder, later, while they were dying out in England, almost secured a foothold in America; one was held in Bermuda in 1668. The borough courts were in all essential respects similar to the courts of piepowder; unlike the Italian guilds the English never acquired special privileges in them, perhaps because the merchant status was not confined to guild membership.

Meanwhile other courts were seeking the business of the merchants' courts. For a time in the fourteenth and fifteenth centuries the courts of the staple applied the law merchant; during the same centuries the nascent Court of Admiralty competed but ineffectually, both because of local antagonisms and because of its own inefficiency. From Tudor into Stuart days a revived and strengthened Court of Admiralty fought a losing fight to administer the law merchant together with the maritime law, as so many of the mediaeval courts had done. Although historical logic and commercial convenience were on its side, the increasing attacks of the common law judges on its jurisdiction were successful in the seventeenth century and the Court of Admiralty was stripped of jurisdiction over almost all commercial causes. The English merchants were traditionally never sufficiently organized to enforce their wishes; the strong royal power which had restrained the power of the towns and later that of the nobles limited also that of the guilds, and the few protests made were ineffectual.

By its absorption into the English common law the law merchant at once lost on the procedural side the swift and summary informality which had theretofore characterized it throughout Europe, and this it has never regained. As it

was still a body of customary law, the common law judges had also to be educated as to its substantive content. This was less difficult, because much of the common law rested historically upon a customary basis. Piecemeal therefore the judges obtained evidence as to the custom applicable to the particular commercial case at bar. The process was laboriously slow; for example, from the reign of Queen Elizabeth to 1756 there are not sixty cases of insurance in the English reports. Chief Justice Holt at the end of the seventeenth century and at the beginning of the eighteenth began to lay down general rules of commercial law, introducing continental doctrines as necessity required. This integration was coherently completed by Lord Mansfield in the latter half of the eighteenth century, a large body of reported precedents being thus available for American commerce after the revolution.

Uniformity is of the essence of the law merchant. It has resulted from the necessary and permanent conditions of trade, whether national or international. These conditions have demanded various substantive rules, some of them fairly permanent and others changing from time to time with altered conditions. Usually it has not been difficult to make such changes, because the people who lived under the law merchant have generally had the power to alter it by custom. Legislatures and courts alike recognize the power of commercial custom to do today what it did in the past. Of the law merchant an English court has said: "It is neither more nor less than the usages of merchants and traders . . . ratified by the decisions of courts of law, which upon such usages being proved before them, have adopted them as settled law." Several of the most widely adopted modern uniform statutes contain the statement that in any cases unprovided for therein, the rules of the law merchant shall govern. The law as to trust receipts and letters of credit is almost wholly an outgrowth of modern commercial custom.

In 1306 Pope Clement v by his bull *Saepe contingit* defined the meaning of the directions theretofore almost universally given to the judges of commercial courts to proceed swiftly, plainly and without technicality. In these respects it must be conceded that modern courts administering the modern law merchant could learn from their predecessors of six centuries ago.

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See: COMMERCIAL LAW; COURTS, COMMERCIAL; MARITIME LAW; COMMERCE.

Consult: Morel, François, *Les juridictions commerciales*

au moyen âge (Paris 1897); Mitchell, William, *An Essay on the Early History of the Law Merchant* (Cambridge, Eng. 1904); Holdsworth, W. S., *A History of English Law*, 9 vols. (3rd ed. London 1922-26) vols. i, v and viii; Sanborn, F. R., *Origins of the Early English Maritime and Commercial Law* (New York 1930). See also the bibliography under COMMERCIAL LAW.

LAW OF NATURE. *See* NATURAL LAW.

LAW REFORM. *See* JUSTICE, ADMINISTRATION OF; SOCIAL REFORM; PROCEDURE, LEGAL.

LAWES, SIR JOHN BENNET (1814-1900), English agricultural chemist. Lawes was born at the manor house, Rothamsted, Hertfordshire. When he came of age he took over the management of the home farm and installed a chemical laboratory. He turned in 1837 from the study of drugs to that of the relations between chemistry and agriculture, experimenting on the nutrition of plants in pots and testing results on his field crops. The treatment of bones with sulphuric acid was already known. But by applying the process to apatite, coprolite and other mineral phosphates he indefinitely increased the supply of the materials of efficacious manures. In 1842 he took out a patent for superphosphate and established factories for its production at Deptford in 1843 and at Barking in 1857. Lawes was thus the founder of a national industry for the manufacture of products which have revolutionized agriculture. Of equal significance was the fact that he used the fortune he acquired from these activities to conduct those field and feeding shed experiments and laboratory investigations in the plant and animal life of the farm which have made the experimental station at Rothamsted so famous in the world of agricultural science. The results of these researches, systematically begun in 1843 with the assistance of Joseph Henry Gilbert and carried on ever since, have established general principles of the nutrition of plants and animals which are universally applicable. In order to insure their continuance Lawes in 1889 created the Lawes Agricultural Trust, to which he assigned the buildings and land for a long term of years as well as an endowment fund of £100,000.

ERNLE

Important works: "The Rothamsted Experiments" (in collaboration with Joseph Gilbert), Highland and Agricultural Society of Scotland, *Transactions*, 5th ser., vol. vii (1895). The same text, with only minor verbal changes, is printed under the title *Agricultural Investigations at Rothamsted, England, during a Period of Fifty Years*, United States, Office of Experiment

Stations, Bulletin, no. 22 (1895). For a bibliography of the more important papers issued by Lawes and Gilbert, see Appendix to Hall, A. D., *The Book of the Rothamsted Experiments* (2nd ed. London 1917) p. 311-22.

Consult: Warrington, R., "Biographical Introduction: Sir John Bennett Lawes, Bart. 1814-1900" in Hall, A. D., *The Book of the Rothamsted Experiments*, p. xxi-xxxii.

LAWGIVERS. Common usage generally distinguishes between lawgiver and legislator, limiting the first term to a person who promulgates a code of laws and the second to the author of a single statute or series of statutes. But there has often been an unfortunate confusion between the two terms. Nor is the lumping of both ideas under a single word, as in the German *Gesetzgeber* (statute giver) and the French *législateur* (proposer of a statute), any more desirable. The difficulty in these cases as well as in other modern European languages is due to the failure to differentiate clearly between law (*Recht, droit*) in its wide sense and statute (*Gesetz, loi*) in the narrow meaning of a particular law. In Latin the word *legislator* is employed to indicate the proposer of a law, whether he be emperor or jurist; *jurislator* or *jurisdator* is never found, while *legem dare* (to give a law) and *lex data* (a given law) refer respectively to the granting of a private right and the enactment of a statute by an official without concurrence of the popular will (e.g. *lex coloniae genitivae*). A lawgiver such as Justinian was probably termed *legislator*. In Greek there prevailed a confusion similar to that which exists in English. *Thesmos* originally meant a single sentence or statute, *nomos* the body of law. Solon himself considered that he issued *thesmoi* (statutes), while Aristotle two hundred and fifty years later wrote of him as a lawgiver.

The first requisite of a lawgiver seems to be divine inspiration. Thus Hammurabi declares in the preface to his code that the god Marduk directed him to deliver the principles of justice to the people; the Sumerian Urukagina received the law from Ningirsu; Moses was the deputy of the Lord in the Ten Commandments and His oracle in the Pentateuch; Athena in a dream communicated the laws of the Locrians to the lawgiver Zaleucus. In some cases the lawgiver was the deity; in others he was identified with a deity and thus considered semidivine. The earliest English usages of the term constantly refer to "God, the lawgiver"; non-Christian religions have likewise attributed this function to their

supreme deity. Manu, the Brahman lawgiver, was a minor deity and Menes and other Egyptian lawgivers, such as Ramses II and Bocchoris, were pharaohs and thus semidivine. Elsewhere a minor deity, later demoted to the position of hero, is considered divinely inspired when he acts as lawgiver.

A plurality of contemporary lawgivers is never possible. The decemviri who formulated the Roman Twelve Tables would seem to comply with the necessary conditions, yet they were not considered lawgivers by the Romans nor do moderns so regard them. But certain codifications attributed to absolute rulers were conceived of and executed by commissions, as, for example, the *Corpus juris* of Justinian and the *Code Napoléon*, known earlier as the *Code civil des français*; other laws, such as those forming the Code of Hammurabi, were probably enacted by commissions of jurists.

Lawgivers are never known as such by their contemporaries. Stalin and Kemal Pasha may in time be called lawgivers; today they are but legislators. Draco, considered by his contemporaries merely as a special judge (*thesmochetes*) issuing decrees (*thesmoi*) which, provided they were accepted by the populace, might eventually become law (*nomos*), was termed a lawgiver by fourth century Greeks and is so considered by the modern world. Theodosius II, the author of the *Codex theodosianus*, was called a "preserver of statutes and decrees"; today he is known as a lawgiver.

A curious relationship exists between lawgiver and judge. The old Germanic lawgiver (Danish *lov-giver*) was actually the judge, and such is the technical usage of the term among legal scholars today. It is to be noted, however, that the absolute rulers who have been mentioned as lawgivers were also judges to their contemporaries. In his code Hammurabi speaks of giving law (*mīšaram šakanu*), while in contemporaneous Babylonian documents the king judges (*mīšaram šakanu*) in private causes of action. It has been pointed out that Draco was a judge (*thesmothetes*); the Roman jurists looked upon their emperors as interpreters of the law rather than as originators. The relationship of judge and lawgiver is no doubt due to the idea so prominently displayed in Germanic and Anglo-American law that the judge is enabled to create the law *ex vacuo* by reason of his divine inspiration.

The nature of the law uttered by the lawgivers varies greatly. It may be in the main religious

and theological, as the Pentateuch of Moses and the Koran of Mohammed; the point of view may be military, as in the legendary enactments of Romulus or Lycurgus; or the penal element may be emphasized, as in Hammurabi's code or Draco's decrees; it may even be purely theoretical and only a goal to be attained, as the utterances of Manu. But modern research has discovered what seems to be a common element in the law enacted by all lawgivers: despite denial by the lawgiver the law given is not generally new but a codification of existing customary law, juristic utterances or legislative enactment. Investigation has shown this to be true of the Code of Hammurabi; the Mosaic code is most likely a codification; Justinian himself tells us that the *Corpus juris* (except of course the *Novellae*) is for the most part a compilation of statutory and juristic materials. This is also true of other legislation: the Twelve Tables, which were not compiled by a lawgiver, and the Laws of Gortyn, whose lawgiver is unknown, are codifications of existing law. Similar to these and yet never attributed to lawgivers are the compilations made by private individuals and termed law books, such as the Syrian Roman law books, whose author is known; and the Assyrian law books (often erroneously called a code), whose author is unknown. The character of the law cannot therefore be correlated with the presence of a lawgiver.

Urugagina, the Sumerian ruler of Lagash (c. 2750 B.C.), and Nabunaid of neo-Babylonian times (556-539 B.C.) are important as givers of cuneiform law; Hammurabi, ruler of Babylonia (dates unknown), is of course of outstanding significance. But no lawgiver was responsible for the Assyrian law books of the fifteenth and fourteenth centuries B.C. nor for the collection of enactments of various dates known as the Hittite code (written c. 1350 B.C.). The Greek writer Diodorus mentioned as Egyptian lawgivers the pharaohs Menes (c. 3400 B.C.), Ramses II (1292-1225 B.C.) and particularly Bocchoris (718-712 B.C.) and Amasis (569-525 B.C.), but this information is not as yet substantiated by hieroglyphic sources. Moses is the supreme giver of Jewish law, although he certainly did not write all that has been attributed to him. Many of the prophets might be considered lawgivers. For Talmudic and rabbinical times the jurists Judah ha-Nasi (second century A.D.), Maimonides (1135-1204) and Joseph Caro (1488-1575) are perhaps worthy of the name. The earliest Greek lawgivers were colonials: Zaleucus

(c. 650 B.C.) of Achaean Locris and Charondas (c. 650 B.C.) of Ionian Catana. In the homeland the legendary Lycurgus of Sparta and the renowned Draco (c. 621 B.C.) and Solon (c. 594 B.C.) of Athens were lawgivers of the first rank. The Hellenistic legal system had no outstanding lawgiver, unless Ptolemy Philadelphus (285-246 B.C.) of Egypt be so designated. The ancient kings of Rome, notably Romulus and Numa, have been termed lawgivers, but strictly speaking it was not until the absolute empire that Roman rulers attracted world wide attention through their achievements in codification; the *Codex* of Theodosius II (published 438 A.D.) was merely a compilation of statutory material, whereas the *Digesta* and *Codex* of Justinian (527-65) encompassed both legislation and juristic literature. In a sense some of the classical jurists whose work Justinian collected—among others, Julian (second century), Papinian (d. 212) and Paul (first half of the third century)—might be designated lawgivers because their interpretation was instrumental in the creation of bodies of law. For other ancient legal systems, such as the Chinese and Japanese, lawgivers are, at least to occidental thought, unknown. Manu and the less known Yājñavalkya (fourth century) were outstanding Hindu lawgivers.

Mediaeval Germanic law is almost entirely without lawgivers; the legislation is anonymous and the true lawgiver is the judge. There are, however, a few exceptions: the code for non-Goths issued by the Gothic kings Alaric II (484-507) and Theodoric (c. 500); the code of Alfred, king of the West Saxons (878-901); and the *Constitutio criminalis carolina* of Charles V (1519-58). Among the Slavic peoples lawgivers were more numerous, although here also anonymity was general. The Celtic king Howel (909-50), author of the Welsh code, qualifies as lawgiver. In Islamic law there is but one recognized lawgiver, Mohammed (c. 570-632), author of the Koran. As among the Romans, however, jurists and founders of schools—for example, abu-Hanīfah (c. 699-767), Mālik (715-95), al-Shāfi'ī (767-820) and ibn-Hanbal (780-855)—might be so designated. If the term were acceptable with regard to canon law, Innocent III (1198-1216), who was responsible for the *Corpus juris canonici*, and Gregory IX (1227-41), author of many decretals, would be the great lawgivers.

Since the Middle Ages practically every nation has had one or more lawgivers, but of these only Napoleon has achieved universal fame. The one great legal system which has no outstanding

lawgiver is the Anglo-American; and because the concept is so difficult to define, it would be idle to attempt to enumerate the English rulers or the Anglo-American jurists who might be so designated.

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See: LAW; CODIFICATION; JUDICIAL PROCESS.

Consult: Koschaker, P., *Babylonisch-assyrisches Bürgerrechtsrecht* (Leipsic 1911) p. 10-11, especially note 41; Walther, A., *Das altbabylonische Gerichtswesen*, Leipziger Semitistische Studien, vol. vi, pts. 4-6 (Leipsic 1917) p. 80-103; Smith, J. M. P., *The Origin and History of Hebrew Law* (Chicago 1931) p. 173-80; Menes, A., and Bialoblocki, S., "Gesetze," and Gorion, Emanuel bin, "Gesetzgebung" in *Encyclopaedia judaica*, vol. vii (Berlin 1931) cols. 355-83; Weiss, E., *Griechisches Privatrecht auf rechtsvergleichender Grundlage*, vol. i— (Leipsic 1923—) p. 29-133; Bonner, R. J., and Smith, G., *The Administration of Justice from Homer to Aristotle*, vol. i (Chicago 1930—) ch. iii; Mommsen, Theodor, *Römisches Staatsrecht*, Handbuch der römischen Alterthümer, vols. i-iii, 3 vols. (3rd ed. Leipsic 1887-88) vol. ii, p. 881-83, 888-94, and vol. iii, p. 308-12; Kreller, H., "Zur Lehre der klassischen Juristen über das Gesetzgebungsrecht des Prinzepts" in *Zeitschrift der Savigny-Stiftung für Rechtsgeschichte, Romanistische Abteilung*, vol. xli (1920) 262-72; Jolly, J., *Recht und Sitte*, Grundriss der indo-arischen Philologie und Altertumswissenschaft, vol. iii, pt. 8 (Strasbourg 1896), tr. by B. Ghosh as *Hindu Law and Custom* (Calcutta 1928) p. 1-101; Maciejowski, W., *Historia Prawodawstwa Stowianskich*, 4 vols. (Warsaw 1832), tr. into German by F. J. Buss as *Slavische Rechtsgeschichte* (Stuttgart 1835-39) vol. i, p. 206-12; Rahim, Abdur, *The Principles of Muhammadan Jurisprudence According to the Hanafi, Maliki, Shafi'i and Hanbali Schools* (Madras 1911) ch. ii, and ch. iii, sect. i.

LAWLESSNESS is a term applied to the behavior of a social group which is considered to be consistently refractory and to be habitually breaking important legal rules. It is, however, an extremely treacherous term. The judgment that the group is violating important rules and is therefore lawless is usually that of some outsider. More often than not this outsider when he calls a group lawless possesses no reliable information as to its actual habits; for statistics of "offenses known to the police" are virtually non-existent in most countries, and where they are available they reflect not the extent of criminality but the degree of police efficiency. Most accusations of lawlessness leveled at a group are expressions of an egocentrism that persists in judging the behavior of another group in terms of the standards and prejudices of one's own. The Indians are lawless judged by the norms of their English administrators, and to Americans with a stake in Central America the Nicaraguan

nationalists are merely brigands. Pascal remarked that "three degrees of latitude reverse all jurisprudence; a meridian decides the truth," and that "theft, incest, infanticide, patricide have all had a place among the virtues." The entire concept of lawlessness is confused by the narrowness of group attitudes and the relativity of legal standards.

The term lawlessness is thus more often used as an epithet charged with emotion than as a sober description of fact. Typical is the generalization that in certain races or nations there is an "instinct" or "tendency" to lawlessness. That thesis is patently absurd when it purports to be based upon the fact that in a given country acts frequently occur which while within the law of that country would be criminal if committed in many other countries; the supposed lawlessness signifies only that not all groups have the same criminal code.

The concept of a national tendency to lawlessness becomes more plausible when it is asserted that some nations are peculiarly accustomed to infringe their own laws. It is possible—although there are no adequate statistics to confirm the supposition—that the French are less given to obedience to the provisions of the enacted code (what is called civism) than the English. In like fashion much is made of American lawlessness; attention is drawn to the fact that the United States constitution was adopted in direct violation of the Articles of Confederation, that the "best citizens" in some sections proudly defy the Fifteenth and the Eighteenth Amendment and that every American infringes numerous penal laws every day.

But it must first be noted that in this habit of ignoring their own laws the French and Americans are not unique: every group violates not only the rules that other groups consider important but even some of its own rules. All groups have their pseudo-standards, their "pretend rules"; it is part of the rules of any group to break some of its own rules. Greeks and Trobrianders, New Yorkers and Hottentots, not only preserve but currently produce apparently significant rules which they circumvent or openly violate but which they refuse to abandon. It may well be true that France and the United States are more addicted to the enactment of pretend rules and more reluctant to repeal them than England. It is probably true also that national modes of dealing with unrepealed pseudo-standards differ; the French and Americans prefer openly to break such rules, while the

English prefer to circumvent them by deft use of legal exegesis, subtle judicial interpretations. But the pronounced pseudo-standardism of the French or Americans may be fully as conducive to group welfare as the much praised civism of the English. Regardless of these differences, in all groups the pretense of strict obedience to the law is customarily maintained; and even where statutes have been enacted which go beyond the point where widespread enforcement is possible, the cry of "law enforcement" is continually raised (*see* LAW ENFORCEMENT).

Since the violation of some laws is a normal part of the behavior of every member of every group, lawlessness reduces to a charge of a mistaken selection of the existing laws which are to be ignored. It is evident that the notions of what constitutes such a mistaken selection vary from group to group and are not uniform even within any particular group. Religious, political and economic stratifications cut across each legal community; the attitudes of any individual are conditioned by a complex of influences impinging upon him from his various "relationships." His conception of what laws may be violated or ignored without serious hurt to his "moral sense" is likely to be a resultant of these influences. By appropriate selection any subgroup can prove that some other subgroup is lawless. Thus the lawlessness of the "lower classes" is apt to run in terms of crimes of violence, that of the "upper classes" in terms of crimes involving fraud.

The seeming lawlessness of any group is the result of the gap between the legal standards apparently set by the political community and the more exigent ethical standards and psychological drives operative within that particular group. That part of the "law" that is actually placed on the statute books and enforced rests at best on a narrow base which is made all the narrower by the successive selective processes that are at work in molding it. What is placed on the statute books is in theory the expression of a "general will": in actuality it is the expression of the wishes of the dominant political group and economic class or the result of the interaction of various pressure groups or even the arbitrary and whimsical desire of some individual legislator. Which of the statutes that are thus enacted will appear to be broken depends on further selection through the activities of the law enforcing agencies. If a police chief or a public prosecutor determines to enforce a specific code provision, violation of that provision

will become lawbreaking, while others that are not thus enforced remain in obscurity. Discrimination in the arrest and prosecution of Negroes, Mexicans and radicals will make those groups seem unusually lawless. There remain as the final selective agency the judge and the jury. No matter who violated the statutes, only those whom the judge and the jury (correctly or incorrectly) choose to find guilty will appear as lawbreakers.

The modern state brands direct private vengeance lawless and claims a monopoly of crime punishment; the judicial process has become the lawful substitute for private war; it supplants the quarrel with fists or with lethal weapons by the battle of the court room. But in that battle there are elements that may be of incalculable harm to the group spirit. The barbarity of third degree police methods is notorious. And even in court room procedures such "lawful" devices as the failure to reveal important evidence, the deliberate obscuring of issues, the browbeating of foreigners and radicals, the appeal to the crude prejudices of a jury, are not unknown. Added to this is the unequal financial capacity of the various classes for a prolonged court battle. Together these factors may make of court procedure an instrument of chicane and of the oppression of the innocent and the submerged. And as the state monopoly of crime punishment is often inefficiently administered, many criminals are protected from harm at the hands of law abiding citizens who obey the law which forbids private vengeance. Such results may be more subversive of group welfare than is the lawlessness of open brigandage or outright murder.

Once it is recognized that relativity and egocentrism are inherent in the concept of lawlessness, the problems of so-called frontier lawlessness, immigrant lawlessness and racketeering change their character. The frontiersmen faced a social situation which seemed to them to demand that the laws prohibiting self-help, made in more settled communities, should be selected for non-enforcement. Those pioneers were no more lawless than are New Yorkers, who seldom if ever seek to enforce the statute making male adultery a crime. Alleged lawlessness of any subgroup when carefully scrutinized usually turns out to be the breaking of laws made elsewhere or by someone else—the someone else being sometimes a past generation. The subgroup accused of lawlessness, acting under the pressure of a specific social situation (often

involving too rapid transition), is making a revised choice of the rules which are to be treated merely as pretend rules. In these terms modern urban racketeering, the Mafia and Camorra in America, the seeming lawlessness of the second generation of immigrants or of Negroes in the United States, are in some considerable measure explicable. In the same way one finds a key to a product of capitalist society, the violation of the criminal code, in the exploitation of the huge chances for profit under individualist enterprise, where the stakes are high, the situation is a rapidly shifting one and the slow moving legislative and judicial machinery has left irritating obstacles in the way of business enterprise.

Little help and much hindrance in dealing with the problems of social control is rendered by the use of the word lawlessness. At its best it connotes an absence of law. But the symbol "law" is itself fatally ambiguous; by usage it may properly be employed to symbolize a dozen different subject matters; there is a growing inclination to abandon it as a useful label. Lawlessness as a symbol is still more vague and confusing. It should be excluded as far as possible from the vocabulary of careful students of society. Whenever it is encountered, it should be subjected to wise skepticism, washed in what Mr. Justice Holmes called "cynical acid."

JEROME FRANK

See: LAW ENFORCEMENT; CONSTITUTIONALISM; VIOLENCE; CRIMINAL LAW; CRIME; POLICE; JUSTICE, ADMINISTRATION OF; GANGS; RACKETEERING; BRIGANDAGE; FEUDS; LYNCHING; RACE CONFLICT; FRONTIER.

Consult: Malinowski, Bronislaw, *Crime and Custom in Savage Society*, International Library of Psychology, Philosophy and Scientific Method (London 1926) p. 112-29; Sumner, W. G., and Keller, A. G., *The Science of Society*, 4 vols. (New Haven 1927) vol. i; Duguit, Léon, *Les transformations du droit public* (Paris 1913), tr. by Frida and H. J. Laski as *Law in the Modern State* (New York 1919) ch. iii; Wigmore, J. H., "The Judicial Function," and Wurzel, K. G., "Methods of Juridical Thinking" in *Science of Legal Method*, ed. by R. Gray, Modern Legal Philosophy series, vol. iv (Boston 1917) p. xxx, xl, and 341-52; Frank, Jerome, *Law and the Modern Mind* (New York 1930), "Are Judges Human?" in *University of Pennsylvania Law Review*, vol. lxxx (1931-32) 17-53, 233-67, "What Courts Do in Fact" in *Illinois Law Review*, vol. xxvi (1931-32) 645-66, 761-84, and "Mr. Justice Holmes and Non-Euclidean Legal Thinking" in *Cornell Law Quarterly*, vol. xvii (1931-32) 568-603; Warner, S. B., "Crimes Known to the Police—an Index of Crime?" in *Harvard Law Review*, vol. xlv (1931-32) 307-34; United States, National Commission on Law Observance and Enforcement, *Reports*, nos. 2, 3, 4, 7, 10, 11, 13 and 14 (1931); Arnold, J. W., "Progress Report on Study of the Federal Courts—

No. 7" in American Bar Association, *Journal*, vol. xvii (1931) 799-802; Tourtoulon, Pierre de, *Les principes philosophiques de l'histoire du droit*, 2 vols. (Paris 1908-19), tr. by M. M. Read as *Philosophy in the Development of Law*, Modern Legal Philosophy series, vol. xiii (New York 1922) p. 114-16, 120-28.

LAWRENCE, SIR HENRY MONTGOMERY and FIRST BARON, JOHN LAIRD MAIR, British colonial administrators. Sons of Anglo-Indian parents of north Irish extraction, Henry (1806-57) was educated at Addiscombe and John (1811-79) at Haileybury, the first joining the Bengal Artillery and the second the Indian civil service. Both attracted the attention of Lord Hardinge and were employed, Henry in 1847 as resident at Lahore and John in 1846 as commissioner of the Jalandhar country ceded after the First Sikh War. The duties of Henry as resident were exacting. He was expected to reorganize by persuasion and personal influence the Sikh government, which had broken down after the death of Ranjit Singh in consequence of the self-seeking of the nobles and the failure of control over the army. The great problem was how to introduce reforms without the ostensible use of British agency. This in fact proved insoluble. After the Second Sikh War, when Dalhousie annexed the Punjab, Henry became head of the board to which the administration was entrusted. Like Elphinstone he aimed at maintaining the position and influence of the great landholders, considering that they were the natural leaders of the people and that reforms should be introduced by their means and cooperation. In this policy he came into sharp conflict with his brother, who was also a member of the board. Whereas Henry's experience had lain mostly among princes and nobles, John's had brought him into close touch with the peasantry of the country. In Jalandhar he had been struck by the degree in which the peasant was exploited by the noble and had formed the view that the main object of British effort should be to deliver him from this exploitation. Dalhousie sympathized with John's views and was glad to be able in 1853 to remove Henry from the Punjab by appointing him resident in the Rajput states, where his sympathy with Indian nobles could receive free play without involving principles of national policy. In 1857 Canning appointed Henry chief commissioner of Oudh after the annexation of that province. But the mutiny broke out too speedily to allow his administrative gifts to be fairly tested. He was killed in 1857 defending the residency at Lucknow. Meanwhile John had

been entrusted with the management of the Punjab. There his policy succeeded so far that when the mutiny broke out, the Sikhs strongly supported the British against the mutineers, who consisted mainly of Rajputs, Brahmans and Moslems from Oudh and the neighboring country. He retired after the mutiny but in 1863 was appointed viceroy, being the only civil servant in seventy years to attain that rank. As governor general he was less successful than as ruler of the Punjab but did much to promote the interests of the agricultural classes by extending railways and irrigation and insisting on administrative economy. He retired in 1869 and died in England ten years later.

H. H. DODWELL

Consult: Edwardes, Herbert, and Merevale, H. C., *Life of Sir Henry Lawrence* (3rd ed. London 1873); Smith, Reginald Bosworth, *Life of Lord Lawrence*, 2 vols. (6th ed. London 1885); Aitchison, C. U., *Lord Lawrence* (Oxford 1892); Innes, J. J. M., *Sir Henry Lawrence, the Pacificator* (Oxford 1898).

LAWS OF WAR. *See* WARFARE.

LAZĂR, GHEORGHE (1779-1823), Rumanian educator. Lazăr, who came of Transylvanian peasant stock, studied mathematics and theology at the University of Vienna. Because of his passionate enthusiasm for Napoleon he failed to secure the bishopric of Karlowitz and was refused appointment to the chair of theology at Czernowitz. He taught for a while at the theological seminary in Sibiu and after the overthrow of Napoleon he went to Bucharest. In 1816 he established at the monastery of Saint Sabbas the first national Rumanian school of applied science and engineering and in 1818 published an appeal to the Rumanian youth to patronize this school and to rise against the dominance of Hellenic cultural influences in Moldavia and Wallachia. By his stress of the use of the Rumanian vernacular he laid the foundations for a national Rumanian culture in Wallachia at almost the same time that Gheorghe Asachi and Veniamin Costachi were establishing the first Rumanian schools in Moldavia. A prolific and versatile author, Lazăr wrote on mathematics, geography, philosophy, history and theology. All his writings were prompted by a nationalist motive, and he has come to be recognized as the initiator of the Rumanian national renaissance.

CHRISTINE GALITZI

Consult: Georgescu, Ioan, *Gheorghe Lazăr* (Bucharest 1923); Iorga, Nicolăe, *Cel dintâi învățător de ideal*

național Gh. Lazăr (Bucharest 1916), and *Istoria Românilor* (7th ed. Valenii-de-Munte 1929), tr. from 2nd ed. by J. McCabe as *History of Roumania* (London 1925); Eliade, Pompiliu, *De l'influence française sur l'esprit public en Roumanie* (Paris 1898) p. 311-18, and *L'esprit public en Roumanie au XIX^e siècle* (Paris 1905).

LAZARUS, MORITZ (1824-1903), German psychologist. After obtaining his degree from the University of Berlin in 1850 Lazarus first published an essay in which he attempted to justify Prussia's hegemony in Germany. He then wrote a series of psychological monographs later collected under the title of *Das Leben der Seele* (2 vols., Berlin 1856-57; new ed., 3 vols., 1882-85), during the preparation of which he formulated as early as 1851 the principles of his collective or group psychology. In 1860 he and Heymann Steinthal, his brother-in-law, launched the *Zeitschrift für Völkerpsychologie und Sprachwissenschaft*, which served as an organ for their scientific views. In the same year Lazarus was appointed professor of psychology at the University of Berne but in 1867 he returned to Berlin, where after serving a few years as instructor of philosophy at the Berlin Royal Military Academy he was eventually given the title of honorary professor at the university.

Lazarus was a devoted follower of Herbart in both his philosophy and his psychology, but his conception of a collective psyche as distinct from an individual mind was original. He stressed the fact that psychological investigations cannot confine themselves to the study of individual consciousness but must take into consideration history and comparative cultures. He was charged with holding the mystical view of a superindividual soul and drew the criticism of many contemporary writers, especially Wundt, who, however, later developed his own system of collective psychology. Lazarus conceived of a group mind as a functional unit integrative of the constituent individual minds. Language was for him the essential bond among the members of a nationality—territory, religion, common traditions and history being rather propria.

Lazarus' strenuous communal activity and organizing ability as well as his benign personality contributed to his far reaching influence. He rendered considerable service as a Jewish apologist in combating antisemitism; his sentiments on the Jewish problem were assimilationist in tone. His work *Die Ethik des Judenthums* (Frankfort 1898, 2nd ed. 1899; tr. by H. Szold, 2 vols., Philadelphia 1900-01), although by on

means adequate, is an important contribution to this sparsely explored field.

A. A. ROBACK

Consult: Moritz Lazarus *Lebenserinnerungen*, ed. by N. R. Lazarus and A. Leicht (Berlin 1906); Münz, B., *Moritz Lazarus* (Berlin 1900); Achelis, T., *Moritz Lazarus* (Hamburg 1900); Leicht, A., *Lazarus als Begründer der Völkerpsychologie* (Leipzig 1904); Roback, A. A., "The Jewish Founders of Collective Psychology" in *American Jewish Chronicle*, vol. iii (1917) 671-73; Lewkowitz, A., "Moritz Lazarus zum 100. Geburtstag" in *Monatsschrift für Geschichte und Wissenschaft des Judentums*, vol. lxxviii (1924) 185-92.

LAZZARI, COSTANTINO (1857-1928), Italian labor leader. Lazzari had no formal schooling but read widely, especially during his frequent imprisonment. After working as printer and traveling textile salesman he joined the labor movement and became one of its best orators. He was active in the first Italian workers' political organization, the *Figli del lavoro*, founded in 1871, and in 1882 inspired the unification of its sections in the *Partito operaio italiano*, on whose executive he served for many years. Under his leadership the party having decided to admit intellectuals transformed itself in 1890 into the *Partito dei lavoratori italiani* and in 1892 after breaking with the anarchists became the *Partito socialista italiano*.

From the outset Lazzari was a thoroughgoing Marxist in theory and tactics and one of the most effective Marxist propagandists in Italy. He fought the influence of both Bakuninists and republicans and especially of the opportunist socialists led by the revisionist Turati. Lazzari successfully defended his revolutionary views at thousands of party meetings and in the party press, and in 1912 a left wing majority elected him party secretary. He led the party in opposing the patriotic position taken by other socialist parties in violation of the resolutions of the international congresses of 1907, 1910 and 1912. It was Lazzari's policy "neither to approve nor hinder" Italy's participation in the World War. Lazzari played a leading role in obtaining the dismissal of Mussolini from the editorship of *Avanti* in October 1914 for betraying the party, and his proposal to expel Mussolini was almost unanimously adopted. Although he admired the Russian Revolution and Lenin, Lazzari opposed the conditions which the Third International wished to impose upon the Italian Socialist party; because the party followed his lead it was expelled from the Third International. In 1919 Lazzari was elected to Parliament. He regarded

as weak the decision of the left parties to boycott Parliament as a protest against the murder of Matteotti; he went to the Chamber to protest against the restoration of capital punishment but was violently thrown out. After this incident he retired; he died in great misery in Rome. From the beginning of the organized labor movement until the establishment of Fascism Lazzari was the leading left wing Socialist in Italy.

ANGELICA BALABANOFF

Consult: Angiolini, A., *Socialismo e socialisti in Italia* (Florence 1900); Balabanoff, Angelica, *Die Zimmerwälder Bewegung 1914-1919* (Leipzig 1928), and *Wesen und Werdegang des italienischen Fascismus* (Vienna 1931); Michels, Roberto, *Sozialismus in Italien: intellektuelle Strömungen* (Munich 1925).

LEA, HENRY CHARLES (1825-1909), American historian. A native of Philadelphia, Lea entered his father's publishing firm at the age of eighteen and for a number of years devoted himself to business and to literary criticism. Ill health and the distraction of the Civil War delayed until 1866 the publication of his first major work, *Superstition and Force* (Philadelphia; rev. ed. 1892). The appearance in the following year of his *An Historical Sketch of Sacerdotal Celibacy in the Christian Church* (Philadelphia 1867; enlarged to two volumes, 3rd ed. New York 1907) established clearly the direction of his studies; his subject was the Latin church, "the great fact which dominates the history of modern civilization." His *Studies in Church History* appeared in 1869 (Philadelphia; 2nd ed. 1883), followed after a gap of eighteen years by *A History of the Inquisition of the Middle Ages* (3 vols., New York 1887-88; rev. ed. 1906); *Chapters from the Religious History of Spain Connected with the Inquisition* (Philadelphia 1890); *A Formulary of the Papal Penitentiary in the Thirteenth Century* (Philadelphia 1892); *A History of Auricular Confession and Indulgences in the Latin Church* (3 vols., Philadelphia 1896); *The Moriscos of Spain, Their Conversion and Expulsion* (Philadelphia 1901); *A History of the Inquisition of Spain* (4 vols., New York 1906-07); and *The Inquisition in the Spanish Dependencies* (New York 1908). Severing his active connection with the firm in 1880, he concentrated on building up with the aid of the fortune he had accumulated the valuable library of printed books and the vast collection of manuscripts for his historical work which are now in the library of the University of Pennsylvania.

Lea was both an original historian and a pioneer of historical study in the United States.

He always went to the sources and studied them profoundly, sometimes to the neglect of secondary material. Maitland summed up his achievement thus: "It is Dr. Lea's glory that he is one of the very few English-speaking men who have had the courage to grapple with the law and the legal documents of Continental Europe. He has looked at them with the naked eye instead of seeing them—a much easier task—through German spectacles." The naked eye was that of a scientific worker with an ethical bent and a hatred of unnecessary suffering and injustice. "I commenced my medieval studies," he once wrote, "without any preconception adverse to Catholicism, but I found the Church as a political system adverse to the interests of humanity. Against it as a religion I have nothing to say." Lea's work on the Inquisition won praise from Lecky, Maitland, Acton, Molinier and Paul Fredericq. Catholic criticism has fastened on Lea's lack of theological knowledge and his alleged unfairness in the interpretation of mediæval documents. But this condemnation is restricted to a few parts of his work only; the depth and the minuteness of Lea's knowledge is generally admitted. The objectivity of his treatment had a great effect upon American historical learning, while his career and methods showed how the resources of Europe might be made available to the serious American investigator.

E. F. JACOB

Consult: Bradley, E. S., *Henry Charles Lea, a Biography* (Philadelphia 1931), with bibliography; Cheney, E. P., and others, in *American Philosophical Society, Proceedings*, vol. I, no. 198 (1911) iii-xlii; *Henry Charles Lea, 1825-1909* (Philadelphia 1910), a privately printed memoir; Haskins, C. H., in his *Studies in Medieval Culture* (Oxford 1929) p. 256-62, reprinted from *Massachusetts Historical Society, Proceedings*, vol. xliii (1909-10) 183-88; Baumgarten, P. M., *Die Werke von Henry Charles Lea und verwandte Bücher* (Münster 1908), tr. as *Henry Charles Lea's Historical Writings* (New York 1909).

LEADERSHIP may be broadly defined as the relation between an individual and a group built around some common interest and behaving in a manner directed or determined by him. It must be distinguished from two somewhat analogous relationships, which flank its widely varying forms at each extreme. If the dominant individual holds his power by virtue of an external convention, such as custom or law, he becomes the agent of authority and the group consists not of followers but of subordinates. If, at the opposite pole, his position rests upon nothing more than his capacity to appeal to the mem-

bers of the group through stimulating their emotions and offering suggestions to their instincts, he is to be classed as an agitator or as a demagogue (in the derogatory sense of this term), acting upon a mob in which individuals virtually cease to be independent agents. Strictly speaking, the relation of leadership arises only where a group follows an individual from free choice and not under command or coercion and, secondly, not in response to blind drives but on positive and more or less rational grounds. In the specific instance the conceptual distinctions between leadership, the exercise of authority and demagoguery of course tend to become attenuated; one phenomenon may easily pass into another in the course of a single sequence of events. But in general leadership implies a following whose behavior is the result of a conscious consideration of the leader's personality, of its own interests and of the anticipated social consequences.

Leadership in the strict sense admits differentiation into two types, which may be appropriately designated as representative or symbolic and dynamic or creative leadership. All groups whether created by custom and tradition or purposefully organized have common interests and needs, which call for action. A representative leader is an individual who satisfies the expectations of the group by acting on its behalf. Striking illustrations of representative leadership are provided by legendary or quasi-legendary figures: the Homeric or Old Testament hero in the van of the fight or in single handed combat with the common foe; the valorous benefactor of mankind, destroying monsters, breaking the wilderness to the plow or prevailing against the flood; the sage who discovers the means of solving a dispute between two tribesmen; figures like Achilles and David, Heracles and Theseus, Siegfried and Roland, the shrewd Arabian caliph and the wise dervish of India. The static conditions of primitive life everywhere reveal the phenomenon of one or more individuals leading the group from which they are differentiated on the basis of their real or accepted distinctive prowess in its traditional activities: the process of selection may be more or less mechanical, as in the case of the gerontocracy of the totemic civilizations of central and southern Australia; or it may depend primarily upon personal qualities, as among the North American Indians. Pontiac and other Indian leaders, as has been shown by recent anthropological investigations, afford abundant illustration of the personal traits

and devices which permit an individual to become the center of group activity without changing its essential direction. In modern as in primitive times and in all spheres—military, political, economic, technological, cultural, religious—leaders in the sense of preeminent representatives of their group exercise a notable influence on the course of events by serving as models for others to imitate. They may even become symbols entirely abstracted from the group and typifying for later generations the values for which it stood: such in historic and modern times are Henry V as delineated by Shakespeare; Joan of Arc as the protagonist of French national independence; Garibaldi as Italian patriot and archetype of republican; Emperor William I as the pattern of a moderate monarch remote from political brawls. But in so far as such leaders merely incarnate in peculiar degree values already generally or widely disseminated or form a link, although perhaps one of extraordinary dimensions, in the chain of established group activity they are to be distinguished from creative leaders.

Creative leadership emerges when a personality becomes the propulsive force for a value or complex of values or in certain circumstances for a systematic program, rallying about himself a group of men which on a small or a vast scale creates a stronger pressure than could emanate from any individual. The program may be directed toward material ends—economic, technical or political—or toward spiritual ends—religious, moral, humanitarian, artistic. But in any case this type of leadership diverges from representative leadership in that it involves an attempt to enrich or alter the existing stock of values in the possession of a society by gaining acceptance for an innovation freshly created by the leader or, if the innovation has been borrowed from another culture, by diffusing it in the new area. The path breakers of the early Italian Renaissance, Brunelleschi, Donatello and Masaccio, discovered the paramount importance in architecture, sculpture and painting of an eye satisfying proportion between the various components of a work of art. The German reformers developed the doctrine of justification by faith, which liberated the layman from the priest and gave him immediate access to a personal God. Defoe in *The Collective Body of the People* and Rousseau in his *Contrat social* introduced the concepts of demonstrative gatherings and of petition which offered to the individual voter previously unknown mechanisms for controlling

Parliament even in the intervals between elections. Externally the strength of the dynamic leader is embodied in the followers who gather about him; his distinctive mark in contrast to other leaders is the creativeness of his work. It is the creative type to which the term leader in its more specific connotation applies.

The influence of the genuine leader as opposed to the merely representative leader is characterized not merely by its greater profundity and intensity but also by its radiation over a far wider sphere. Under his propulsive force the members of the group whom he activates may themselves become the material of leadership and develop into a class or stratum grasping and exercising the function of leadership over a constantly expanding body of men. This latter phenomenon is typical of the process of dynamic leadership in political relations, where the functions of leadership become magnified and therefore most easily analyzed. Here the formation of a group with the attendant establishment of certain values or the securing of certain interests within it does not constitute an end in itself, as in the case of leaders who organize a following about some economic, religious or cultural purpose outside the political arena; it is merely a stepping stone to the broader goal of creating or reorganizing a state.

Political theory until late in its development completely neglected the sociological phenomenon of leadership, taking no account of the existence of separate politically oriented groups within the state. The emergence of the state was explained as a process of union between merely two elements, the ruler and the people, the latter being considered as a homogeneous unit. The process according to such theories was essentially the same whether under primitive conditions, where the state was considered as supplanting a loose, unpolitical community, or among civilized peoples, where it was created from a grouping of tiny polities. The only question which absorbed the investigator in this period of political theory was whether a towering personality imposed himself by force upon the masses of the people or whether the people collectively appointed a ruler. David Hume in his *Essays, Moral and Political* (2 vols., London 1741-42) was the first to restate the whole problem in its modern form. He pointed out, first, that the processes conceived as alternative by the older theorists were in reality inseparable, for the towering personality could win submission to his rule only after he had demonstrated his

achievements in defense against the enemy, in the establishment of law and order or in the positive promotion of the public welfare. In other words, Hume introduced the thesis that submission is brought about in the first instance not by force but by "opinion" and "interest"; that is, by the conviction on the part of those submitting that such a course is advantageous. Above all, Hume was the first to stress the essential fact that the leader never gains the adherence of all the people simultaneously. The process begins with the voluntary submission of a limited group—warriors, priests, wealthy landowners—acting through opinion and interest; with these supporters the leader then subdues the others possibly and in the lower stages of political development regularly by brute force. A slow evolution involving many intermediate stages must be traversed before the masses adhere of their own choice on the basis of a conscious conviction of the benefits to be derived. "It is, therefore," says Hume, "on opinion only that government is founded; and this maxim extends to the most despotic and most military governments, as well as to the most free and most popular. The sultan of Egypt, or the emperor of Rome, might drive his harmless subjects, like brute beasts, against their sentiments and inclination; but he must, at least, have led his *mamelukes* or praetorian bands, like men, by their opinion."

The process of reorganizing an already existing state is far more common and from the practical point of view more important than the creation of an entirely new state. As the first prerequisite of such reorganization the leader must develop a loyal and financially powerful body of supporters who, after he has furnished them with the indispensable equipment of a will to power, have the capacity to overcome the adherents of the existing government or, if the latter are suffering from ineffectiveness or lack of cohesion, to supplant them. The members of this first following are destined to constitute the leading class of the reorganized state, of which they are the nucleus. Once the reorganization has occurred, the abler among them function as legislative, administrative or judicial officials while the remainder crystallize into the ruling party—a social stratum unconditionally supporting the new system. Striking illustrations of this process are offered by the states which have directly or indirectly grown out of the World War; the separation of Poland and the Baltic countries from Russia and of Czechoslovakia from Austria, the piecing together of the frag-

ments of the old Ottoman Empire into the new Turkish or Arabian state, show in each case the preliminary stage of group formation (nationalist parties) within the old imperial state and the subsequent emergence of the party leaders—Pilsudski, Masaryk, Mustafa Kemal, ibn-Saud—as the governing statesmen of the new national state and of their followers as the governing class. The most impressive examples are the evolution of Soviet Russia and of Fascist Italy. Mussolini in organizing his *fasci di combattimento* not only acted upon but developed the doctrine that the reconstruction of a state presupposes the existence of a trained hierarchy (*gerarchia*) to replace the nucleus of the old state.

The phenomenon of leadership in political relations offers a natural and convenient approach to the study of the psychological processes and social factors involved in the genesis of leadership in general. Recent students of political parties have in fact greatly enriched knowledge of this subject. The basic fact is that followers gather about the leader because they recognize in him a protagonist of values or interests which they hold dear. In all ages the most recurrent motivation of party formation has been the struggle for economic advantage. A military class may be rallied, as has repeatedly occurred in modern Spain, when a general issues a pronunciamiento promising that officers will be provided with governmental posts or parliamentary seats or, as in a more remote period, with colonial offices. The same motivation was at work in the creation of the modern Japanese constitutional state, to which the impoverished samurai gave their support in the expectation of economic rehabilitation, and in the Russian October revolution of 1917, which promised land to the peasants and control of the factories to the industrial proletariat. The laboring class supporting a leader who holds out the prospect of higher wages or cheaper food is driven by impulses basically similar to those which cause industrial magnates to assemble about a common banner in quest of protective tariffs. But under a Mohammed organizing the Arabs in the desert and under the leaders of the English Independents, who later became the central force of the Puritan revolution, the more common economic motif may be replaced by a spiritual or religious one; or the emphasis may be on ethical values, as in the case of Freemasonry as a movement for religious toleration and to some extent in the American abolitionist movement; again, the values may be intellectual, as with move-

ments for the promotion of national culture, such as the Flemish movement for school reform. On a still different level leadership may have as its immediate purpose the substitution of a progressive for an absolute and outgrown constitutional form. Or it may disregard or subordinate domestic problems to concentrate on aggrandizement in foreign affairs in the manner of Lord Beaconsfield toward the end of his life. Leaders repeatedly combine objectives from two or more of these categories: Daniel O'Connell and Charles Parnell gave the Irish movement, originally an agrarian protest against English absentee landlordism, its peculiar character by coupling it with Celtic nationalism and with Roman Catholicism; the French Revolution in addition to attacking the privileges of the aristocracy was a movement against Catholic orthodoxy and the influence of the church in appointments to public office.

The situation is further complicated by the interplay between political parties and independent non-political groups constructed within the state about some cultural, occupational or other interest. Such groups are likely to shift their weight from one party to another according to circumstances: thus the American farmers' organizations support with equal fervor the Republican party on one occasion and the Democratic party on another, and the German peasants' associations vacillate between conservatives and democrats. A close scrutiny of such groups leads to the conclusion that the social and psychological factors involved in the genesis of leadership are essentially the same in the case of a group built about a non-political interest as in the political party. The former may as a result of accident or change in leadership merge into the latter, as did the English trade unions.

The possible variations of the leader's position are infinite, if only because each case is individually shaped by the particular positive interest which is the basic motive impelling followers to gather. Even when the goal is set, the means which the leader may employ to consolidate his following are as diverse as the circumstances which condition them. The method of appeal depends fundamentally upon the leader's calculation of mass psychology in the particular environment in which he is operating. In some cases, if, for instance, those whom he wishes to recruit have arrived at a high stage of political maturity, he can rely on their comprehension of the idealistic social purpose which he is pursuing.

In other cases he may be forced to subordinate his main purpose in his propaganda and to tempt followers by the prospect of incidental advantages, such as patronage or accession to the wealth of their predecessors in the old regime. Or he may enshroud his purpose in a veil of religious sentiment. The crucial test is whether or not he can arouse the faith of his followers in his personality, for only through such faith can he inculcate in them the power of endurance and the spirit of devotion to the common cause without which he cannot succeed. The traits of personality enabling the leader to impress a following vary with the program to be achieved and with the types which he addresses, but certain traits can be abstracted as generally effective in a particular situation or environment. In the Latin nations brilliance of bearing and command of propagandistic rhetoric may be the most valuable assets (as witness Bonaparte and Gambetta); among the Anglo-Saxons severe reserve and lucidity of argument (Cromwell, Marlborough, Wellington and Kitchener); among the Germans an intimate understanding of the people (Prince Eugene and Blücher). Irrespective of racial, national or situational peculiarities especial efficacy is always inherent in isolation, the maintenance of distance, marked simplicity and ascetic habits.

There are also certain external devices which the leader may employ in building a group: an apt epithet for the object of attack, such as "aristocrats" and "privileged classes" in the first phases of the French Revolution and "despotism"—a term often applied with amazing looseness—in all constitutional struggles; such slogans as "Italia unita e Roma capitale" in the Italian Risorgimento, "home rule" and "Sinn Féin" (independence) in the Irish struggle for freedom and the corresponding terms, "swaraj" and "swadeshi" in the contemporary Indian movement. The red shirt of the Garibaldians, the black shirt of the Fascists and the designation *Il Duce* (the leader par excellence), the cult of George Washington in America, all illustrate the use of symbols by promoters of movements to transmit to their followers a whole complex of associated values. Although they further the process of group formation, such devices lend themselves with great facility to demagogic abuses.

The pivotal problem in the study of leadership is the determination of what objective factors enable a leader to emerge and assemble a following. As the problem is often stated, is leadership ex-

plained by the personality and creative power of the leader or by the might of circumstance, by the fact that the need for innovation has reached such a degree of acuteness that the emergence of a leader becomes inevitable? Or according to the crude formulation is leadership a function of the hero or of the environment? It has already been implied that the question cannot be posed in these terms. Only when the two factors coincide—the acutely felt need for change and a personality adapted to the particular situation—can the process of group formation for the fulfilment of that need be set in motion. Attempts to lead in the absence of sufficient pressure for change, whether the absence be due to purely environmental factors or merely to the apathy, immaturity or unaggressiveness of the populace, which too are objective factors, have always either miscarried or been snuffed out after a few flickerings. This is the explanation for the failure of Vercingetorix to rally the Gauls against the Romans, of Cola di Rienzi in his attempt to overthrow the Roman oligarchy, of Babeuf in his drive for political communism toward the close of the French Revolution. On the other hand, even where the need is present and felt, it by no means follows that an individual with the necessary intelligence, energy, endurance and magnetism, the peculiar combination of traits and the exact orientation required will appear; still less that the material for a leading class will be at hand. Evils can exist and be recognized for decades or centuries without the emergence of a person to lead the reform. Even when the leader comes he must first give proof of his peculiar ability to carry out the appointed reform before the formation of a group can be actually achieved. Only in the course of the movement will it become apparent whether the alleged leader is cast in a different mold from the mere representative of authority or from the simple demagogue. Repeatedly it happens that the leader at hand—for example, the descendant of a monarch who has won a following through his pursuance of a social or national purpose—lacks the personal strength to remedy the evil, which must remain flagrant until an adequate individual arises; thus the attainment of Prussian hegemony in Germany was interrupted under William I, who in 1859 proved unequal to the conflict with Austria and the Prussian lower house, to be continued only with the emergence of Bismarck. Similarly a true leader may take up a task where it has been left shipwrecked by a demagogue, finding in the situation created by the latter the necessary

foundation for his own success: thus Cromwell built upon the abortive work of the nobility who in 1628 had aroused the House of Commons to the importance of safeguarding the constitution.

Even where the initial success of the leader is independent of environmental factors, these operating through the following may radically affect the established leader and his program. Again the Fascist movement is peculiarly instructive. So long as it was in its incipient stages (1919–22), its leader directed it essentially in the interests of the middle class, whom the war had impoverished, aiming no less against international capitalism than against international socialism and clericalism. When, however, industrialists and financiers sent their sons and employees in multitudes into the storm battalions, Mussolini in the process of expanding the organization into a party had no other alternative than to proceed along capitalistic lines; he was henceforth financed by the capitalists and was forced upon an unwilling monarch as prime minister. Stated abstractly, an interaction had taken place between Mussolini and his environment, as the result of which his program had become modified. Established leaders as a rule are subject in greater or less degree to environmental influences; as their potential lines of penetration multiply, they are faced with the alternative of ineffective intransigence or compromise with the demands of their new adherents.

RICHARD SCHMIDT

See: SOCIAL PROCESS; COLLECTIVE BEHAVIOR; AUTHORITY; PERSONALITY; GENIUS; HERO WORSHIP; SYMBOLISM; AGITATION; DICTATORSHIP; REVOLUTION AND COUNTER-REVOLUTION; POWER, POLITICAL; CAPTAIN OF INDUSTRY; GROUP; CROWD; MOB; MASSES; INNOVATION; CHANGE, SOCIAL; CONTROL, SOCIAL.

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LEAGUE OF NATIONS. The League of Nations is the first attempt in history to furnish the international society of nations with a permanent and organic system of international political institutions. This attempt was an outcome of the World War. Before the war began, far seeing statesmen and writers on international affairs were predicting that some day such a system of institutions would be built up but they believed that centuries must elapse before their visions could be realized.

The impact of the World War upon the minds and consciences of men quickly changed their

outlook. Indeed before the war actually began, while the tragic negotiations for its prevention were still under way, the British foreign secretary, Sir Edward Grey, declared that if Europe could be pulled through the crisis, it would be the duty of the statesmen of the world to try to create some international system by which such crises might in future be averted. Only a month later the British prime minister took up Sir Edward Grey's idea and declared that it was a war aim of the British people to create a league of peace at the close of hostilities. Two years later in 1916 Lord Robert Cecil wrote a memorandum which led to the creation of the Phillimore Committee, whose task was to draw up the first outline sketch of the international organization. Before the Phillimore report was completed, President Wilson laid down the war aims of the United States in his Fourteen Points, among which appeared the creation of the League of Nations. As the war drew to its close in the month of November, 1918, Lord Robert Cecil in his inaugural speech as chancellor of the University of Birmingham explained in detail the fundamental principles and obligations upon which he believed the League should be built up. He had drawn naturally enough upon the findings of the Phillimore report, and his speech was followed shortly after by General Smuts' well known paper to the cabinet in which he too sketched the framework of the League as he conceived it. At the same time Léon Bourgeois as president of a French government committee was preparing a similar scheme. Other governmental and private groups in many countries, both belligerent and neutral, were at work. There can be no doubt that the influence even of the private groups was great. The League to Enforce Peace in the United States, the League of Nations Society in Great Britain, Lord Bryce's committee and others produced proposals which secured a serious measure of public attention.

The primary preoccupation of the British and American statesmen who led the League of Nations movement and who finally brought the League into being was the question of how to keep the peace. The war in its effect upon the mind of the average citizen and the average soldier provided the political driving force which secured the establishment of the League. Moreover the experience of the war influenced the preparation of the League in still another respect. During the operations of 1915 to 1918 a number of Allied committees were set up to deal

with the control of shipping, raw materials, foodstuffs, fuel, munitions and the like. These committees and their secretariats developed in a considerable measure a new technique of international cooperation, which was continually in the minds of the practical politicians who drew up the Covenant of the League.

Yet although it is true that the League was born of the war, it is also true that in a considerable measure the nature of the international institutions created by the Covenant was determined by pre-war movements.

The first of these movements was the Concert of Europe. The Concert was taken by those who drafted the Covenant as the model for the Council of the League, which they believed would prove to be the real peace making agency in the League structure and the agency moreover which would control effectively the whole of its activity and work. The second movement was that which culminated in the two Hague conferences of 1899 and 1907. These conferences served as a pattern for the Assembly of the League, which it was expected would take over and develop the "legislative" function which the Hague conferences had begun to use. The third movement was that of the so-called Technical Unions, of which the Postal Union was the earliest and the most successful example (*see* INTERNATIONAL ORGANIZATION).

Thus the pre-war experience of these three international movements was combined with the war experience of the authors of the Covenant in the shaping of the institutions which the Covenant set up. It must be added, however, that the statesmen of 1919 realized very clearly that these pre-war movements had been but inadequate attempts to meet the pressing needs of a changing world (*see* INTERNATIONALISM). They perceived that the enterprise of creating permanent international political institutions could be rationally based only upon a consciously accepted conception of an international society. They understood—and the statesmen who have worked under the Covenant have come more and more consciously to accept the same point of view—that such a society requires international institutions, founded upon an international constitution, providing for the members of the society rules of law to guide their relations with each other: institutions to declare these rules laws, to interpret them, to change and mold and complete them as the requirements of a changing and growing society may require.

The Covenant of the League of Nations is the

"written constitution" of the international society of states. It is always so treated and is openly spoken of as such in the debates of the government lawyers in the First [Legal] Committee of the Assembly. It contains the constitutional provisions by which the international institutions of the League were created, the provisions by which their powers are defined and the fundamental rules which the members of the League undertake to observe in their mutual relations. Around it has grown up in recent years a great new body of "constitutional" international law. The mandates treaties, the minority protection treaties, the Statute of the Permanent Court of International Justice, the Optional Clause attached to that statute, the General Act for the Pacific Settlement of International Disputes, even the Pact of Paris, are international law-making conventions whose legal character like that of the Covenant itself is in the strictest sense of the word constitutional.

The body of international constitutional law is being further increased by resolutions of the Assembly. Some classes of resolutions—those, for example, which create new international institutions attached to or working with the League—are definitely legislative in their nature. It may perhaps be added that in the procedure of the Assembly, the Council and the other organs of the League, based as it is upon a written code and developed year by year by general practise, another branch of constitutional law is being developed.

The character of the Covenant as the constitution of the international society of states proves that the League was intended to be universal. And in practise despite the fact that certain great states are not members all its work is conducted on the assumption that it is entitled to act for international society as a whole and that the rules which it adopts must be appropriate for universal acceptance.

The whole strength of the League, particularly at moments of international crisis, has been gravely impaired by the fact that the United States and Soviet Russia are not members. It has been further impaired by the fact that Brazil and Costa Rica have formally resigned membership and that Argentina has been temporarily suspended. The very right of resignation is, although politically necessary in the early stages, in reality inconsistent with the character of the League as the permanent political framework of an organized society of states. The membership of the dominions of the British Com-

monwealth has sometimes been the object of criticism. Such criticism, except perhaps in so far as it regards India, is ill informed. Those who know the reality of the governmental freedom of the British dominions know that they are as truly "independent States" as very many of the other members of the League.

The main organs of the League are the Assembly, the Council, the Secretariat, the Permanent Court of International Justice (*q.v.*) and the International Labor Organization (*q.v.*). In addition there are a number of subsidiary organs created by Assembly resolution and now firmly established as a permanent part of the machinery of the League. Such, for example, are the Communications and Transit Organization with its tri-annual conference and its standing Advisory Technical Committee served by the Communications and Transit Section of the Secretariat; the Health Organization with its periodical conferences and its standing committee and subcommittees; the Economic and Financial Organization with its periodical conferences and its permanent Economic Committee and Financial Committee; the Permanent Mandates Commission established by the Council in pursuance of article 22 of the Covenant; the Advisory Committee on Traffic in Opium, the Committee on Traffic in Women and Children and the Committee for the Protection and Welfare of Children and Young People grouped together under the heading of the "social and humanitarian" activities of the League. In addition there are a great number of temporary ad hoc committees established to study and report upon certain subjects, as, for example, the Preparatory Commission for the Disarmament Conference and the Slavery Committee.

All these organs form an integral part of a single coherent system of institutions. No one of them could effectively accomplish the tasks with which it is entrusted if it were cut off or separated from the rest. Their activities are co-ordinated and—with the exception of the Labor Organization—controlled and directed by the Assembly.

The Assembly consists of representatives of all the members of the League. The Covenant states that each member "may have not more than three Representatives," but in fact the Assembly itself has interpreted this provision so broadly that the number of active delegates which represent any country in the Assembly and its committees may greatly exceed the allotted three. It was expected by the authors of the

Covenant that the Assembly would be a cumbersome "diplomatic" body; that it would be difficult for it to make decisions; that its very size and the slowness of its action would militate against its authority. They hoped that it would develop the legislative functions which the Hague conferences had attempted to fulfil. But so relatively unimportant did they consider these functions that they debated at length whether they should insert a provision that the Assembly should meet "at least once in four years." In other words, they expected that the real power and authority of the League would lie not in the Assembly but in the Council, which they regarded as the organ that would group the great powers.

All these previsions have been falsified by experience. The Assembly has become the supreme organ in the system of the League. It is universally recognized that the sovereign power of the League lies in its hands. It has indeed developed legislative functions as the authors of the Covenant hoped; it has drawn up a whole series of most important international conventions; it has legislated by resolution. But it has also become the controlling and the initiating agent in every department of the work of the League. The Assembly has achieved this position of supremacy because it has become a parliamentary body. Its composition and work bear hardly a trace of the old diplomatic conferences of the past. Its code of procedure was drawn up at the first meeting by the president, Paul Hymans, foreign minister of Belgium; Viviani, ex-prime minister of France; Lord Robert Cecil and Sir Arthur Balfour, cabinet ministers of Great Britain; and Newton W. Rowell, lord president of the Council in the government of Canada. These distinguished parliamentarians made rules for its working which insured that in all respects it should function as an international parliament, and in the years which have followed the Assembly has been successful in exact proportion to its management by parliamentarians in accordance with parliamentary practise.

The idea that it should meet only at long intervals of time has likewise disappeared. Like other government institutions the League must have a budget; as in every parliamentary country the League budget must be voted every year. Since only the Assembly representing the sovereign will of all the members of the League could draw up the budget, the Assembly must necessarily meet at least once in each year. In

fact it has not only met every year in the month of September, but there have also been two special assemblies, one in March, 1926, for the admission of Germany, another in March, 1932, to deal with the Manchurian dispute between China and Japan.

The plenary meetings of the Assembly consist of all members of the various delegations. In these plenary meetings the general work of the League during the year is debated; elections (to the presidency, vice presidencies, to the General Committee of the Assembly, to membership in the Council, to judgeships of the Permanent Court) are held; the Assembly committees are established and reports from these committees received. Under the standing rules of procedure six committees are appointed, each consisting of a representative of every member of the League. These committees all meet in public and each of them deals every year with certain special subjects: the first committee with legal questions; the second with technical questions, such as health, economics, finance, transit; the third with disarmament, security, arbitration and allied matters; the fourth with the budget of the League; the fifth with social and humanitarian activities; the sixth with political questions. It is the general practise of delegations to send to these committees representatives with special knowledge of the matters with which they are to deal. It thus happens that over a period of years the committees have achieved a high degree of expert knowledge and the debates of the matters submitted for their consideration have often been on the highest level.

The Assembly begins each yearly session with a general debate in which the international situation and the work of the Council, the Secretariat and the subsidiary League organizations are reviewed. Questions arising out of this current work and all proposals made by governments to the Assembly are then referred to the six committees; the committees debate them in detail and draw up reports, setting forth their conclusions or recommendations for further action. These reports then come before the full Assembly. As a rule they are accepted almost without discussion, unless for some special reason debate is thought to be required. This procedure promotes speed and efficiency in dealing with the general work of the Assembly, while maintaining safeguards in case the committees' work is unsatisfactory.

It is in the Assembly that the power of the small nations has made itself felt. It was ex-

pected by the authors of the Covenant that leadership and control would remain in the hands of the great powers. In many ways they have, but it is also true that small powers have played a great part in the development of the League through the leadership in the Assembly of such men as Fridtjof Nansen of Norway, Hjalmar Branting of Sweden, Edouard Beneš of Czechoslovakia, E. K. Venizelos and Nicolas Politis of Greece, Louis de Brouckère of Belgium and other distinguished parliamentarians.

The Council is the executive organ of the League. In fact its functions can be described as "executive" only by analogy, since the action which follows from its decisions is for the most part taken not directly by its own agents but indirectly by the governments of whose representatives it is composed. The Council fulfils nevertheless the duties analogous to those which within a national government are entrusted to the cabinet or other responsible ministers. It directs the work of the Secretariat. It makes all decisions concerning the appointment of committees, the summoning of conferences and the like. It receives reports from the subsidiary organs of the League and decides whether or not these reports shall be transmitted to the Assembly. It deals with disputes between members of the League. Indeed it is to the Council that the Covenant entrusts the primary duty of safeguarding the peace of the world. Under the Covenant and other treaties it is specially delegated to supervise and secure the faithful observance of the Mandates and of the Protection of Minority Treaties and Declarations of which the League is the guardian.

When the Covenant was drawn up, the great powers endeavored to confine representation on the Council to themselves only. When they were defeated in this attempt they sought to secure at least a permanent majority of its members. This plan too broke down because of the abstention of the United States, which upset the numbers. Finally the whole conception was abandoned under the pressure of the smaller countries to increase the number of their non-permanent seats. In 1926 a special committee of the Assembly decided that the number of non-permanent members should be increased to nine, although the great powers, who have permanent seats, number only five. This desire of the small powers to be members of the Council springs from two motives. The first is undoubtedly the great prestige which now attaches to the Council. The second is the desire to exercise

the power of veto in cases of international dispute which article 15 of the Covenant confers upon members of the Council.

The Council like any other committee works well when it is well led. But because its tasks are new and constructive and since there is no past experience to guide it beyond that which it has itself built up, it must depend more than most national cabinets upon the leadership of the wisest and the most powerful of its members. Experience has shown that one or two men, acting with a clear vision of what they desire to achieve and with the courage to accept great responsibilities both toward their own nation and the world at large, have been able to transform it into a most effective body. Lord Cecil in 1923, Briand and Stresemann from 1926 to 1928, Henderson and Briand from 1929 to 1931, showed that the Council could be made an organ of high authority in world affairs.

Like the staff of the International Labor Office and of the Registry of the Permanent Court of International Justice the Secretariat of the League constitutes a true international civil service. In 1930 the Secretariat was placed under the rules of a permanent statute which gives its members long term contracts, security of tenure, prospect of promotion and pensions, thus offering them the material basis of independence from pressure by their respective national governments. From its inception the Secretariat has been organized as a single common international service. Every individual section is set up on this same international basis. The members of the Secretariat have been chosen by the secretary general for their personal merits or suitability for their tasks. In building up his staff the secretary general has naturally been obliged to seek, so far as may be, to secure a balance of nationalities, in order that the Secretariat like the Assembly and the Council might be representative of the world at large. The members of the Secretariat are, however, in no sense delegates of their national governments but are responsible to the League alone.

The authors of the Covenant purposely left as elastic as possible the constitution of the new institutions which they created. They believed that it would be unwise to lay down rigid rules for future situations which they could not foresee, and that it was better to leave wide discretion to the statesmen who would build up the customs and the traditions of the League.

Experience has shown that they were right. At certain moments of crisis a more rigid con-

stitution might have been of assistance to those who have sought to uphold the principles of the League. But, broadly speaking, it has proved advantageous to leave the statesmen free to build up constitutional practise as the circumstances of varying cases might require.

In many ways the institutions have worked much more smoothly than was expected. There has never been, for example, any open opposition or clash of interests between the great powers and the smaller states, with the possible exception of the events in the special Assembly on the Sino-Japanese dispute in March, 1932.

Nor have the rules of unanimity and equality of vote given rise to the difficulties which were expected. In the work of Assembly committees decisions are in fact taken by majority vote; and since the full Assembly almost automatically adopts whatever the Assembly committees draw up, the actual decisions on League policy are thus in many matters made by majority vote. No tendency to use the power of veto to obstruct decisions has been shown, at least in public sessions of the Assembly and the Council. In secret sessions, however, difficulties have sometimes arisen; and of course the right of veto legally continues.

Similarly the Assembly and the Council have not encountered serious obstacles in carrying through their functions of election. It is true that elections to the Council and even the last election to the Court gave rise to canvassing on a scale which some critics consider dangerous. Broadly speaking, however, the elections have been carried through, whether for the presidency or other offices of the Assembly, for the non-permanent membership of the Council or for the judges of the Court, with due regard to the necessity for choosing the most suitable candidates.

It was further anticipated when the League began that the preparation of the annual budget would cause great difficulty. Such has not been the case. Many difficulties are avoided by the fact that the budget is subjected to a closer and more effective scrutiny and control than that exercised over the expenditure of any other public money in the world. The estimates of the secretary general are first examined and passed by a supervisory commission, which submits them with a report to the fourth committee of the Assembly, which devotes weeks to their most careful examination. But there has never been any practical difficulty in settling the purposes for which expenditure should be allowed or in

settling the allocation of that expenditure or its repartition among the different members or even (with the exception of a few minor instances) in securing payment of subscriptions by members of the League.

Both in the Assembly and in the Council the practise of holding meetings in public has been of great importance. It has been an almost unvarying rule that public debates have led to better results than private meetings. A well known example is that of a heated dispute in 1927 between Germany and France concerning the territory of the Saar. After a week of private negotiations Briand and Stresemann reported to the Council that they had been unable to reach a solution. In the course of the public debate which followed this report a solution satisfactory to both parties was found and adopted. This introduction of the method of dealing with international business by means of public debate is in reality nothing but the application of the principles of democratic government to the relations between peoples.

As has already been stated, the fundamental purpose of the League of Nations is to organize the international society of states; to create a comprehensive system of law to control all the relations of the members of that society; to provide institutions by which that law can be interpreted, applied and developed and by which administrative action for the promotion of common international interests can be taken. Translated into terms of immediate policy in 1919 this meant that the League was intended by its authors to do three things: first, to keep the peace and settle by pacific means international disputes which might arise; second, to remove the causes of war; third, to organize international cooperation in all spheres of human activity where there were common international interests to be served. These three functions may be considered in turn.

The Assembly, the Council and the Permanent Court of International Justice are all charged with duties for the maintenance of peace and the settlement of disputes. The constitutional law which they apply consists of the Covenant, the Optional Clause, the General Act, the Locarno Treaty, the Kellogg Pact, bilateral arbitration treaties between states and the clauses for compulsory arbitration contained in a large number of general conventions.

The political and judicial organs of the League are in a very real and important sense independent of each other. There has never been any

suggestion that the Assembly or the Council should or could directly or indirectly exercise the slightest political influence over the legal verdicts which the Permanent Court should give. But these organs remain none the less parts of a single and coherent system; and on many occasions they have acted together for the solution of international disputes, the Council handing over to the Permanent Court for advice or decision legal questions with which it was unable to deal. Such constitutional connection and collaboration have been of unquestionable value.

For the most part the constitutional law which has been applied in the settlement of disputes has consisted of the rules of the Covenant. The compulsory jurisdiction of the court under the Optional Clause has been exercised only on one or two comparatively unimportant occasions. The provisions of the General Act have not yet been brought into play. The application of the Pact of Paris has arisen only in connection with the Manchurian dispute.

In application of the Covenant the Permanent Court has up to July, 1932, dealt with forty-eight international disputes. The Council has dealt with more than thirty. In regard to a great proportion of these disputes both the Court and the Council have had a generous measure of success. Except for its decision concerning the Austro-German Customs Union in August, 1931, the work of the Court has been almost free from general criticism. Similarly in most of the disputes with which it has had to deal the Council of the League has been able to secure concrete settlements which in the great majority of cases have meant that the subject of the dispute has wholly ceased to trouble the nations concerned.

It must be noted moreover that in a number of these cases great difficulties were encountered. In four of them hostilities between the parties had actually begun and had to be arrested. Some of the most difficult involved great powers. Examples which may be cited are the Upper Silesian dispute between Germany, Poland and the Allies in 1921, the Upper Silesian minority dispute between Germany and Poland in 1931, the Memel dispute between Lithuania and Memel in 1923, the Mosul dispute between Great Britain and Turkey in 1924, the Austro-German Customs Union dispute between Germany and France and its allies in 1931. Generally, however, the League as a peace keeping organism is judged by its treatment of two dis-

putes, that between Italy and Greece in 1923 concerning the occupation of Corfu and that between China and Japan in 1931 concerning the Japanese occupation of Manchuria. It would be difficult to claim that in the Corfu dispute the League was completely successful. It is fair to say, however, that the difficulties of the League were greatly increased by the fact that the Greek government submitted the dispute simultaneously both to the Council of the League and to the Conference of Ambassadors in Paris and that it undertook to accept the arbitral decision which either of them might make. In consequence Italy refused the jurisdiction of the League and claimed that the ambassadors should decide. Thus the Council could do no more than propose the terms which it would regard as just. But there can be no doubt that it was the pressure of the Council and of the Assembly of the League which was decisive in securing the restoration of Corfu to Greece.

It is still more difficult to estimate the work of the League in connection with the Manchurian dispute, since that work is not yet ended. It may be said, however, that in a particularly difficult case the League gave Chinese leaders a platform whereby they might appeal to the world; that in the Special Assembly of March, 1932, it demonstrated a great body of world opinion which stood for the collective maintenance of international law; and that at least it firmly upheld the principle that in international disputes of whatever kind third party intervention shall be accepted and impartial inquiry carried through by League of Nations' investigators on the spot.

The Manchurian dispute in particular has brought forward the question of sanctions, which is one of the most important problems the League must face. The non-sanction school holds that the League should use only moral pressure against violators of the peace of the world; to seek to prevent war by waging war seems to it a contradiction in terms. The powers holding this view are unwilling to commit themselves to a use of their armed forces, particularly in view of what they call the difficulty of determining the aggressor. The other school considers that article 16 of the Covenant has already committed members of the League to the use of economic and ultimately military sanctions against recalcitrant states. This school believes that the League will not ultimately be able to preserve world peace un-

less it is given power to restrain disloyal aggression in violation of international law. No attempt has as yet been made to apply sanctions whether military or economic, but economic sanctions were successfully threatened against Yugoslavia in 1921.

By the second function which they hoped that the League would fulfil, namely, the removal of the causes of war, the authors of the Covenant meant the ending of annexation by conquest, of "colonial expansion," of secret alliances for war and of inflated and competitive armaments. Conquest is covered and explicitly prohibited by article 10 of the Covenant, the future efficacy of which is bound up with the ultimate result of the Manchurian dispute. Colonial expansion is dealt with by the adoption of the mandates system (*see* MANDATES).

Secret treaties are forbidden by the terms of article 18 of the Covenant, which stipulates that every international engagement of whatever kind must be registered and published by the League before it is binding upon the parties. Many hundreds of treaties have been so registered and published, and as a result the old system of secret military engagements undertaken without the knowledge of the peoples is no longer possible. It is indeed true that the system of military alliances still persists. But it has not the same sinister significance that it had when it was both the legal right and the regular practise of governments to undertake commitments to make war without the knowledge of the peoples on whose behalf those commitments were made.

The problem of armaments remains at the moment of writing unresolved. The Covenant imposes on members of the League the obligation to make an international treaty to reduce their armaments to the lowest level consistent with national safety and the enforcement by common action of international obligations. For twelve years that obligation has remained unfulfilled. But throughout this period preparations for its fulfilment have been going on, and in February, 1932, these preparations led to the meeting of the Disarmament Conference. In the first six months of its existence the conference made substantial progress—progress reflected in the general movement of popular ideas and in President Hoover's bold proposal that existing armaments be reduced by approximately one third.

The third function of the League is to promote international cooperation in all domains where nations have common interests. The au-

thors of the Covenant held that peace was not mere abstention from war but must mean close and active collaboration of many kinds. In this department the League has certainly attained a development and achieved a success which the authors of the Covenant could hardly have expected. The Health Organization, the Communications and Transit Organization, the Social and Humanitarian Section, have all drawn up new conventions and brought about administrative collaboration between governments which holds promise of great progress in times to come. In the economic and financial spheres much has been accomplished. Apart from the financial reconstruction schemes carried through in Austria, Hungary, Bulgaria and Greece and apart from the remarkable settlement of refugees in the latter country the League committees have already done much to bring governments and peoples to face the necessity for conscious control of the world economic and financial machine.

The Economic Conference of 1927 did not produce great immediate practical results, but it spread the germs of a revolution in ideas concerning international trade, particularly with regard to protective tariffs, while the subsequent work of the Financial Committee on the Study of the Gold Standard upon this problem and other allied questions laid a foundation for the work of the World Economic Conference.

In summary it may be said that through the technical and social organizations of the League a new body of international law is being built up in many domains of fundamental importance and that a new technique of administrative co-operation between governments is being worked out. Important concrete results have already been achieved and wide vistas of future progress are being opened. A world public health inspectorate, a world organ for the control or supervision of international lending to governments, are examples of schemes which may become practical politics within the lifetime of the present generation.

In its early days it was often alleged against the League of Nations that it was only "the policeman of the Peace Treaties." The allegation is true only in so far as the League is an organism for preventing violent attack against arrangements established by recognized international law. Legally it "stabilizes the status quo" no more than it was "stabilized" by the international treaties of pre-war days. On the contrary, the League itself provides the first machinery in

history for securing change by peaceful means in existing law or in treaties which have become unjust or inapplicable.

The fundamental problem of securing change by peaceful means in existing international arrangements is that of providing a sense of security from war. Can such a sense of security be hoped for? How far does it now exist? What are the prospects that it will be increased? The answers to these questions must for the near future at least depend upon the solution given to the Manchurian dispute and to the armament problem. If in these two questions the League were to fail or if it were to adopt solutions so inadequate as to destroy confidence in its efficiency as an agent of justice or as a guaranty against war, the prospect of creating a true sense of security would be small.

The establishment of a sense of security, of a belief in the League as the authorized agent of justice and as a certain guaranty against war, must depend in the last resort on its success in developing the political and legal organization of international society discussed above. In this process considerable progress has undoubtedly been made. Constant contact between responsible ministers of state in the institutions of the League has revolutionized the whole conduct of international affairs. International law is being improved and completed. In meetings of the Assembly and the Council a sense of collective responsibility for world peace and for the maintenance of world law is being evolved. The "juristic conscience" of which international lawyers used to speak has become a real and vital factor.

Some progress has also been made toward the acceptance of the fundamental conception of an organized international community; namely, that the vital interests of nations are not in conflict but that, on the contrary, they are common interests which they share. A consciousness of the overriding collective interest of the international society of states is beginning to evolve. The change in this regard is still limited and tentative; nations have not yet definitely accepted the view that their supreme common interest is to maintain the public peace and uphold the public law and that they must therefore be ready to make sacrifices for the common good. Fundamentally the future of the League must depend upon the ideas and beliefs which the citizens of the world accept. The issues of its survival and of its strength are still in doubt, but the experience of its twelve years of

operation proves at least that the experiment has not yet failed.

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See: INTERNATIONAL ORGANIZATION; INTERNATIONALISM; INTERNATIONAL LEGISLATION; INTERNATIONAL LAW; INTERNATIONAL LABOR ORGANIZATION; PERMANENT COURT OF INTERNATIONAL JUSTICE; WORLD WAR; OUTLAWRY OF WAR; PEACE MOVEMENTS; DISARMAMENT; LIMITATION OF ARMAMENTS; MANDATES; MINORITIES, NATIONAL; REPARATIONS; MONETARY STABILIZATION; GREAT POWERS; SOVEREIGNTY; DIPLOMACY.

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LEARNED SOCIETIES. As commonly employed the term learned society, like university, academy and institute, has no very precise meaning. Construed strictly it denotes an association or organization of scholars, whether working in varied fields or devoted to some particular subject or discipline. The term, however, is distinctly modern; and by the time it had come into use many if not most organizations of scholars had been broadened to include persons who although fitted by interest and aptitude to be valuable supporting members had themselves no claim to be regarded as scholars. There are today, particularly in America, few so-called

learned societies other than of this semipopular type; and while the present article excludes from consideration organizations in which the scholarly element—even though supplying the leadership and impetus—is more or less completely submerged in a mass membership of a popular or professional character, the organizations that remain under the rubric learned are in the great majority societies in which scholars and intelligent laymen are intermingled. This article also excludes from consideration educational institutions, research institutes and bureaus and groups of scholars and writers associated principally in carrying on a periodical, such as the *Année sociologique* in Paris. On the other hand, it includes academies.

The antecedents of modern learned societies are indeed to be found in the development of academies, of which the earliest is represented by the group of scholars who gathered at the museum of Alexandria, founded at the beginning of the third century B.C. by the first of the Ptolemies, and devoted attention impartially to all branches of learning then known. Later came the academies founded by the Moors at Granada, Cordova and Samarkand and notably the academy over which Alcuin presided as a branch of the School of the Palace established by Charlemagne in 782. All of these were short lived; and further important developments are not discerned until the beginnings of modern times, when organized groups of litterateurs and scholars assumed a major role in the revival of classical learning, the creation of the new vernacular literatures and the stimulation of scientific inquiry. Italy proved an especially fertile field; and one recalls not only the Accademia Pontaniana—to employ its later name—founded at Naples in 1433 by Antonio Beccadelli but the more famous Accademia Platonica, established about 1474 by Lorenzo de' Medici, which although lasting but half a century became a model for similar organizations both in Italy and elsewhere.

From the later sixteenth century onward academies multiplied throughout all Europe except in the Balkan areas. In Italy the literary Accademia della Crusca dated from 1582; the scientific Accademia dei Lincei, with Galileo as one of its earlier members, from 1603; the short lived scientific Accademia del Cimento of Florence from 1657 and the Reale Accademia delle Scienze from 1757. In France the Académie Française first took form under royal patronage in 1635; the Académie des Inscript-

tions et Belles-Lettres arose as an offshoot from it in 1663; the Académie des Sciences received official status in 1666; and a long list of local academies and societies—at Lyons, Caen, Bordeaux, Montpellier, Pau, Dijon, Rouen, Amiens, Nancy, to mention only a few—sprang into existence between 1700 and 1760. By act of the Convention all prominent organizations of this kind in France were suppressed in 1793. Two years later, however, the same body decided to found an Institut National; and one by one the previous great national academies were reconstituted in the earlier years of the nineteenth century as branches of the Institut. In this form and under their old names all exist today; and the history of modern French learning, science and literature is largely a story of their activities. In Germany a Societas Regia Scientiarum created in 1700 under a plan prepared by Leibniz was reorganized on the French model under Frederick II and received its present constitution in 1812. In Russia the Académie Impériale des Sciences de Saint-Petersbourg was planned by Peter the Great but actually established by Catherine I in 1725. In England James I sponsored a scheme of Edmund Bolton for a royal academy in 1616 or 1617, but the resulting Royal Society did not receive its charter until 1662. This body was devoted almost exclusively to natural science; a British Academy for the Promotion of Historical, Philosophical, and Philological Studies was chartered in 1902.

Although varying widely at many points European academies have in modern times presented certain general characteristics. They have started as or developed into corporate bodies composed of a limited (frequently a distinctly small) number of persons, mainly or exclusively scholars; they have usually sought to occupy a widely comprehensive domain of intellectual activity, e.g. all natural science or belles-lettres or archaeology and history or fine arts; an inevitable tendency to differentiation of interests has commonly led to reorganization in branches or sections or to the emergence of offshoots as new academies; in nearly all cases there has been some form of public and official recognition, most academies having been founded, endowed, subsidized or in other ways patronized by the sovereign of the state in which they were located; and, finally, academies have been typical of an aristocratic age in the sense not only that higher learning and creative scholarship were as always the possession of the few but in the sense also that the social interests and associations of

scholars were commonly bound up with those of the well to do and influential elements of the community.

In an era which has witnessed the steady democratization of learning the old style academy has inevitably declined. Socially it has to a considerable extent been supplanted by the modern club; intellectually it has tended to give way to learned societies devoted, as the academy commonly was not, to precisely defined and often narrowly circumscribed areas or divisions of knowledge. Academies have by no means disappeared; and some without giving up their earlier names and positions have adapted themselves to changing conditions and taken on the characteristics of semipopular learned societies. Many of the number, however, are now mainly of historical interest and make but scant direct contribution to the advancement of knowledge either by research or by publication. Even in the eighteenth century academies as a group were less vigorous and productive than in the seventeenth. Their social, moral and religious roles were important, but most major intellectual labor was performed by investigators and scholars working quite independently of them.

Learned societies of present day Europe date mainly from the second half of the nineteenth century or later; and their great number is accounted for principally by steadily advancing specialization in learning, the rise and development of multifold departments and phases of social science, the growth of the teaching profession, which furnishes a steadily widening constituency, and the abandonment of royal and aristocratic connections which had operated to stabilize and restrict the older academies. Brief mention can be made of the trend of development in only a few countries and in the domain of the social sciences alone.

In England the social sciences did not become subjects of instruction in the universities until very recently—in most cases not until after 1885 or even 1900. That they did so at all was due principally to pressure applied by various nineteenth century societies founded to advance the scholarly and professional interests of their members. The Statistical Society of London, founded in 1834, was until late in the century one of the few learned organizations that furnished opportunities for specialists to meet and discuss their common labors and problems. A National Association for the Promotion of Social Science, established in 1857 and including among its members numerous members of Parliament,

labored for a generation to inculcate an appreciation of the significance of social science and through the several sections into which it was divided gave social studies the bent toward close working relationships with practical affairs which has remained a prominent feature of English learned societies to this day. Some societies, such as the Political Economy Club founded by Tooke in 1821, never advanced beyond the stage of discussion groups. But a Royal Historical Society formed in 1868 although at the outset composed mainly of amateurs attained the character of a permanent association dominated by scholars; a Royal Economic Society dating from 1890 developed along similar lines; and important services have been rendered by such other organizations as the Anthropological Section of the British Association (1884), the Society of Comparative Legislation (1894) and the Sociological Society (1903). Various more recent societies, for example, the Historical Association (1906), the Association of Teachers of Economics (1925) and the Economic History Society (1926), are composed mainly of teachers but are concerned with the encouragement of scholarly work as well as with the promotion of the interests of their subjects in the schools and universities.

Continental Europe has broken with the academy type of scholarly organization less completely than has Great Britain and, speaking broadly, the shift has been rather more in the direction of research, publishing and even teaching institutes than in that of national or regional learned societies after the British and American pattern. In France a *Société d'Ethnographie* dates from 1859, a *Société de Législation Comparée* from ten years later and a *Société des Études Législatives* from 1901. But various societies in economics, such as the *Société d'Économie Politique* (1842) and the *Société de Statistique* at Paris (1860), are insufficiently free from political bias to be regarded as genuinely scientific organizations; and the *École Libre des Sciences Politiques* (1871) and various other *écoles* are primarily teaching and publishing institutions. Germany abounds in academies of sciences, which among other activities have done a great deal of historical research, and in more recent research institutes, such as that at Kiel established by Professor Harms and his associates for the study of problems of international economic relationships. This has not, however, prevented the rise of several genuine learned societies of national scope, notably the *Verein für Sozialpolitik* (1872), possibly to be regarded

as the most important organization of its kind in the world, and the more recent *Deutsche Gesellschaft für Soziologie* (1909). Mention should also be made of the *Görres-Gesellschaft* (1876), which although organized to promote a Roman Catholic orientation has attained a high rank by the quality of its publications in social science and history. The *Friedrich List Gesellschaft* (1925) established by Professor Harms has also attained high standing not only as a learned society but as an agency of collaboration between scholars and men of affairs.

To numerous academies inherited from earlier days Fascist Italy has added an *Istituto Nazionale Fascista di Cultura* and several research institutes and bureaus, linked up with the government on the theory that social science ought to be at the service of the state; and Soviet Russia has developed a vast congeries of institutes and learned societies as branches of a Communist Academy created in 1918. In both of these countries the tendency toward specialized, semi-governmental research institutes is so pronounced that learned societies of more general scope find less opportunity for growth than in other lands, although it may be noted that under a new charter obtained in 1927 the old Academy of Sciences at Leningrad no longer confines itself to history but devotes attention to the entire range of the social sciences.

In the United States the history of learned societies starts with the founding of the American Philosophical Society at Philadelphia by Benjamin Franklin in 1727, an organization which in true eighteenth century fashion took all learning for its province and after more than two hundred years still numbers among its members men of widely diverse intellectual interests. An American Academy of Arts and Sciences established at Boston in 1780, an Academy of Natural Sciences founded at Philadelphia in 1812, an American Antiquarian Society formed also in 1812, an American Statistical Association established in 1839, an Association of American Geologists created in 1840 and broadened in 1848 into the present American Association for the Advancement of Science, an American Oriental Society established in 1842, an American Geographical Society dating from 1852, an American Philological Association from 1869 and a National Academy of Sciences chartered by Congress in 1863 practically complete the list of learned bodies (apart from college faculties) established prior to the last quarter of the nineteenth century. The majority were devoted

primarily—in several instances, exclusively—to the interests of the natural sciences; and at least half were definitely or in effect localized in Philadelphia, New York, Boston or Washington.

Most of the learned societies as they exist today were created after the year 1875. Between that year and 1900 increasing specialization in learning together with the rapid growth of personnel engaged in advanced teaching and research gave rise to a long list of nation wide learned societies, representing not only the principal branches of natural science but also humanistic and social studies which with some impetus from an American Social Science Association (to give it its present name) organized at Boston in 1865, were now for the first time winning recognition and standing as separate disciplines. In the list belong, on the one hand, the American Chemical Society (1876), the American Physiological Society (1887), the Geological Society of America (1888), the American Psychological Association (1892), the Botanical Society of America (1893), the American Physical Society and the Astronomical and Astrophysical Society of America (1899) and shortly afterward the American Society of Zoölogists (1902) and the Association of American Geographers (1904); and, on the other hand, the Archaeological Institute of America (1879), the Academy of Political Science in the City of New York (1880), the Modern Language Association of America (1883), the American Historical Association (1884) and the American Economic Association (1885). Since 1900 the multiplication of societies has gone steadily forward—partly on geographical lines through the development of local or regional organizations, partly on functional lines through the establishment of original societies in virgin fields or more frequently through the splitting off from older societies of groups of persons interested in specialized work in more limited domains. To cite a single illustration of the latter process: members of the American Historical Association specially interested in government and international affairs assembled in 1904 in a new American Political Science Association; groups of specialists from the latter in turn formed an American Society of International Law in 1906, a Governmental Research Conference in 1915 and a number of other subsidiary but independent societies reflecting particular emphases or interests.

A few of the older American societies, for example, the Academy of Arts and Sciences, resemble the typical European academy in having

a closed membership composed of scholars concerned with a wide variety of subjects. The great majority, however, are of the familiar twentieth century sort having to do with a single more or less narrowly delimited field of knowledge, welcoming to membership not only scholars but any other persons having sufficient interest to join and thus combining with an active professional membership, which manages and carries on the activities, a passive lay membership (often larger), whose participation is commonly limited to paying dues, receiving publications and perhaps occasionally attending meetings. As a rule the active professional membership whatever its proportions consists chiefly of college and university teachers in the given field. In the typical case officers are elected anew at each annual meeting; a governing council or board is in part renewed each year; standing and special committees are constituted as required; and funds are obtained principally from annual dues, although a few societies have received modest bequests and some have been given grants for special purposes by one or more of the educational foundations.

Learned societies of the types most commonly found in the United States owe their impetus to the desire of scholars and teachers in particular fields to come together for exchange of ideas and experience and to carry on publishing and other cooperative undertakings of mutual benefit. In these and other ways they correlate and cross fertilize scholarly activity in nearly every branch of learning and promote morale among the workers. Few societies as such engage in research on any systematic and comprehensive lines. Funds are lacking; research machinery beyond an occasional planning or advisory committee rarely exists; in addition there is reason to doubt whether the proper function of such societies is not to foster the research spirit, to accord recognition to worthy research men and projects and to lend moral support to investigative work in universities, institutes and bureaus rather than to become research bodies themselves.

Practically all of the societies engage more or less extensively in publication; indeed it is at this point that they commonly find one of their principal forms of usefulness. No society of consequence fails to maintain a quarterly or other journal and, conversely, few significant learned journals in the country lack such a connection; nearly all publish annual volumes of proceedings; and a growing number either publish di-

rectly books and monographs or subsidize (sometimes with the aid of revolving funds supplied by outside donors) commercial publishers who issue them. Twelve American societies devoted to humanistic or social sciences received for purposes of book publication between 1919 and 1931 a total of \$220,098.74. Nevertheless, more ample funds for this form of activity remain a major desideratum.

The services of learned societies are by no means confined to their own members or even to the scholarly fraternity as a whole. Through studies and discussions of problems of college, secondary and even elementary education in their respective fields many societies give useful stimulus and guidance to the teaching profession. By maintaining advisory committees and through contacts and work of their members individually many render significant aid to agencies of national, state and municipal government. In varying degrees nearly all popularize the results of their work sufficiently to contribute directly or indirectly to the increase of public information and to the development of intelligent public opinion. It should be added, however, that in matters of opinion—especially in such controversial domains as economics and political science—the societies rarely or never put themselves on record as such, preferring rather to provide a forum for the presentation of scientific data and to leave individual members free to express such opinions and to put them before the public in such fashion as they desire.

In a more dogmatic and authoritarian age ex cathedra pronouncements of academies and similar bodies strongly suggested omniscience and finality and usually carried weight accordingly; at present the judgments and opinions of even the most eminent members of learned societies have as a rule rather less influence than that to which ripe and disinterested scholarship entitles them. One hesitates to characterize the general trend and effect of the work of learned societies as any longer distinctly conservative; uninformed and unbalanced radicalism meets short shrift, but the breaking of new ground in thought or method whether by young or old wins almost unfailing acclaim.

The earlier European learned societies long had a pronounced international character, which was well reflected in their use of Latin as the old and of French as the new international language. The growth of modern nationalism has unfortunately resulted in a much greater degree of separation, from which, however, the academies

and societies of today are being measurably rescued by the rise of international federations or unions, notably the Union Académique Internationale founded in 1919 and comprising thirty-one organizations (in eighteen different countries including Japan and the United States) devoted to the philological, archaeological, historical, moral, political and social sciences. This UAI holds an annual meeting in Brussels, maintains a bureau empowered to act for it between general sessions and concerns itself chiefly with advancing international projects of research and securing the good offices of its affiliated bodies for enterprises undertaken and supported by individual academies.

The representative of the United States in the international union is the American Council of Learned Societies formed in 1919, incorporated in 1924 and consisting of two delegates from each of eighteen constituent societies that have grown up in the humanistic and social fields. The council maintains executive offices in Washington, holds an annual meeting and operates largely through an executive committee, an advisory board and an extensive series of committees of experts. In the first ten years of its existence it received and disbursed about \$1,500,000, which was spent mainly in subsidizing publication and in assisting significant pieces of research. Of kindred nature is the Social Science Research Council organized in 1923 and composed principally of delegates of seven affiliated societies. This body has headquarters in New York, has received and disbursed large sums and not only undertakes and subsidizes ambitious research undertakings but through exploratory committees seeks systematically to discover neglected areas of social research and to plan adequate cultivation of them, especially areas or subjects which cut across the boundaries of two or more disciplines. In the humanistic field the Council of Learned Societies and in the social field the Social Science Research Council administer numerous research fellowships designed for younger scholars and make many smaller grants in aid of individual research efforts.

FREDERIC A. OGG

See: PROFESSIONS; TEACHING PROFESSION; UNIVERSITIES AND COLLEGES; EDUCATION; RESEARCH; ACADEMIC FREEDOM; PATRONAGE; ENDOWMENTS AND FOUNDATIONS.

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LEATHER INDUSTRIES

TANNING.....	JOHN R. ARNOLD
LEATHER PRODUCTS.....	BLANCHE HAZARD SPRAGUE
LABOR.....	BLANCHE HAZARD SPRAGUE

TANNING. The tanning, or leather making, industry supplies the raw material used by the manufacturers of leather products. The leather industries as a whole occupy an important economic position; in the United States they constitute a major industry, employing in 1929, for example, 318,415 wage earners, or over 2.5 per cent of all wage earners engaged in manufacturing. About 50,000 of these are accounted for by the tanning industry. Nearly every country has some sort of tanning industry; approximately one third of the world's output of leather, however, is produced in the United States. Tanning is an intermediate industry dependent on the producers of skins and hides and on the manufacturers of leather products.

Processed skins more or less deserving of the name of leather are among the oldest products of human industry. All primitive peoples keeping herds and flocks and all hunting tribes living in temperate or cold climates have known how to produce leather for clothing and other purposes. The skins dressed by many of these peoples, it is true, are not strictly tanned but correspond rather to such modern specialties as rawhide and chamois skin, primitive tanning being essentially a process to preserve skins and hides from rotting and to make them pliable. But the true leather made on a great scale by the native tanners of India is often of excellent quality and has been used in large quantities by the leather goods industries of the West. Leather has certain qualities not easily or completely duplicated in other materials. But the inelastic supply of hides and skins with other conditions has restricted the expansion of the industry. No important new use of leather has been developed in nearly a century, and of very late years

the consumption has even relatively declined a little.

Leather making was highly developed in the ancient Chinese, Indian and Mediterranean civilizations. The ancient methods of tanning were very similar to those prevailing in Europe until well into the nineteenth century. Moreover not only were the processes used throughout this long period and in many countries much alike, but the leather making industry was governed by physical and economic conditions that varied comparatively little from place to place. The raw material was mostly of local origin, and the characteristic unit was a small local enterprise. The curing of hides for shipment in a wet state was not well understood, and salt for the purpose was often scarce or expensive; the undeveloped transportation facilities were inadequate for handling both the hides and the heavier and cheaper leathers. In parts of the Near and Middle East, where the raw material was generally of a lighter weight and long rainless seasons facilitated air drying, these difficulties were somewhat less serious; and the more valuable finished products of the leather industries of those regions began to figure early in the import trade of very distant lands.

As the processes of leather making are essentially chemical and biological, they were inevitably carried out in times that knew nothing of biology or chemistry by tradition and rule of thumb. As a result there flourished the trade secret and the passing on of such secrets through the system of apprenticeship. An industry ruled by these conditions moreover was well adapted to guild organization. The mediaeval tanners were organized in guilds separate from those of the makers of leather products, and they occu-

pied an important position in the structure of guild society.

Methods of leather making began to be improved in both Europe and the United States early in the nineteenth century; but the change was very slow, tanning being one of the industries least affected by the earlier stages of the industrial revolution. Other efforts at improvement concentrated chiefly on the shortening of the process of tanning proper (which in the case of heavy hides had always taken eight or nine months or even longer) and on the devising of machines intended not so much to save labor as processes, such as the even splitting of hides, which it had been impossible to perform by hand. The first shortening of the tanning process was accomplished by the simple mechanisms known as rockers, which keep the hides continuously in motion as they hang in the tan liquors.

The general introduction of machinery into tanneries, however, came late, and even today the mechanization of certain processes is so recent that their results are not yet wholly satisfactory. This is true, for instance, of the scudding, or cleaning of raw hides of the fine hairs missed by the unhairing machine, and of boarding, or graining, and the application of the seasoning mixture in finishing leather. Moreover scarcely any machine yet devised really performs an operation of leather making automatically. Operators of tannery machines must still as a rule be skilled workmen, for if they do not feed the stock and manipulate it correctly during the process they may easily spoil valuable material.

The one radical change in the methods of leather making came with the introduction in 1884 of the chrome process of tanning. Many efforts to develop a process of tanning with mineral salts had been made in Europe earlier in the century, and the successful method was largely the result of German research. But the inventor although of German birth was an American citizen, and his invention was first put to use in the United States. The chrome process was soon extended to the tanning of kid leather and calf skins, but with the heavy leathers (sole, belting, harness and the like) its success has been limited, and its application to some kinds of side leather and sheep skins is quite recent. The new process made possible for the first time the large scale manufacture of kid shoe leather at a moderate price. In the case of all upper leathers it favored a mass output of even quality, suitable for the fully mechanized manufacture of shoes.

This was appreciated rapidly in the United States and only a little later in Germany. In France and England the change was much slower and is scarcely yet complete.

The industrial revolution caused an extensive absolute increase in the consumption of shoes and some other leather goods as of most commodities through the growth of population. In the older countries it also led to some expansion in the per capita demand through the substitution of leather shoes for sabots and sandals or for no footwear at all, by the improvement of purchasing power. But the growth is easily exaggerated, and in the United States at least the per capita consumption has been declining a little for thirty or forty years. The industrialization of tanning was accompanied by some shifts in the relative importance of different countries. During early modern times no one country can be said to have led the others except as France specialized in high grade alum tanned kid for gloves and slippers. The development of British export trade with the industrial revolution brought considerable development in well made utilitarian leathers. The United States and Germany attained international importance in the leather trade with the introduction of chrome tanning and then first challenged French predominance in the kid industry. Since then the relative importance of England and France has declined; but all the industrialized countries at present make substantial quantities of good leather.

Leather making began in the North American colonies with the coming of the earliest settlers; in some cases colonies encouraged tanning by prohibiting the export of hides and skins. The early appearance of small local tanneries in so many American communities was due primarily to the sparse population and the bad roads; but there was also a widely distributed supply of hides and tanbark, and much heavy shoe leather was needed for a rapidly growing population that consisted largely of farmers and other outdoor workers. At a comparatively early period several factors began to distort this local dispersion of American leather making. Of these the most important was the hemlock, chestnut and oak bark supply of the Appalachian highlands. The sole leather tanneries especially moved to this supply; and even today, when most of the bark is gone, hides and quebracho extract from Argentina are hauled up steep graded single track railways into remote valleys of central Pennsylvania and West Virginia, from

which the finished leather must be again shipped out. The calfskin industry, however, remained near the dairies supplying the cities, and the side leather and sheepskin tanneries, being relatively dependent on a reservoir of skilled labor, began to concentrate in the vicinity of Boston. Somewhat later an industry using the Michigan bark supply and selling to the western farm shoe manufacturers grew up in Illinois, Wisconsin and Michigan.

Because of its physical requirements leather making was never a true household industry. Space and drainage were essential, the work was not for women and children, and the capital tied up in stock in process was always relatively large. The more important tanneries therefore early became small factories, while the smaller tanneries today retain many marks of handicraft methods. In the United States ownership or control by families or by close corporations of the family type has been of remarkable prevalence and duration; one tannery of high repute is said to have been under the management of the same family since 1715. The loss of the purely local character of the American tanning industry led to a great decrease in the number of plants and a great increase in their average size. The 6696 tanneries of 1849 had declined to 1306 by 1899, while the number of wage earners rose from 25,595 to 52,109. Between 1914 and 1929 the number of tanneries decreased one third, from 741 to 471; and the proportion of the chief types of leather made by the larger companies has in the main increased. But some large companies have done poorly, and mergers have been few and on the whole unfortunate. The conditions of leather manufacture do not adapt it either to very large plants or to the centralized absentee management of many widely dispersed plants.

Specialization in American leather manufacture developed irregularly. Sheepskin and calfskin tanning from the first involved somewhat distinct techniques. The manufacture of sole and side upper leather separated with the movement of the former to the Appalachian bark supply and the introduction of the splitting machine. The kid leather industry of the United States was made possible by the invention of chrome tanning. There was no domestic supply of goat skins, and numerous attempts to acclimate the French process of tanning such skins with alum and salt had failed. The chrome process made practicable the utilization for the first time by a modernized industry of the large goat

skin supplies of the Mediterranean basin, of the Orient and of Latin America.

Although the American leather industry is extensive, current statements have frequently exaggerated its size—partly as a result of the abnormal expansion during and just after the World War. The value of the annual output between 1923 and 1929 was about \$450,000,000 or \$500,000,000 compared with \$928,591,000 in 1919 and \$367,201,000 in 1914. The number of employees just after the war reached 72,000 but declined to an average of about 50,000 in the years 1920 to 1929. It is hard to generalize about the output because of the varying units of sale; but on the whole the quantity has decreased in recent years. This decline has been the result in part of the loss of war created export markets and in part of the competition of substitutes for leather. The most serious competitors have been rubber and composition soles and rubber and wooden heels and satin and other fabric uppers for shoes. At the same time the vogue of low cut shoes has reduced the demand for all upper stock. Other materials and the individual motor drive have cut into the demand for belting leather, the closed car and the change in styles of furniture into that for upholstery leather, and the development of the so-called artificial leathers into that for fancy sheep and calfskins. Artificial, or rather imitation, leather has been improved in quality and in some cases is preferred to true leather. But it has not been a prime factor in the situation. Of very recent years the competition of substitutes for leather has been developing slowly if at all, and in the near future further losses to the tanning industry do not seem likely to be important.

The American leather industry became mired in the slough of excess capacity and unsatisfactory profits for many enterprises earlier than most of the others that now afford it such a variety of company—in the main shortly after the war. The underlying causes were the same as in other industries; but the trouble developed earlier in the case of tanning because of a stabilized demand, of conditions not favoring complete mechanization and of a peculiarly excessive expansion during the war. Throughout the difficulties of the industry have been accentuated by slow turnover, by unskilfully managed purchases on highly speculative raw material markets, by heavy inventory losses following price declines and by intense competition. It should be said, however, that the progress made in eliminating the least efficient units has recently

been much greater than in most industries. One marked effect of the financial stress of recent years in the tanning industry has been on labor costs. The conventional belief of tanners has been that these costs were unimportant. Relatively to the situation in some other industries and to the cost of leather raw stock this has been more or less true; but the belief tended to divert attention from a mass of inefficiency in the handling of labor that, as prices sagged and profits disappeared, could not be allowed to continue. The concentration of the American output in fewer plants was probably accompanied by some increase in the productivity of labor all along; but the rising prices after 1900 did not encourage effort in that direction, and such evidence as there is does not suggest that the improvement up to 1922 or 1923 was very great. Since 1923 or thereabouts there has been a 15 percent increase in productivity, resulting almost wholly from improved organization and management of the labor force.

The World War by cutting the exports of the European belligerents stimulated production not only in the United States but in many smaller countries previously dependent upon imports. This was particularly true in southern South America, South Africa and Australasia. Some of this development failed to survive the post-war deflation; but these countries now mostly supply their own heavier and cheaper leather, and in the case of Argentina and Brazil at any rate most of the specialized leathers as well. The domestic manufacture of leather of good quality does not, however, expand very rapidly in the less industrialized countries, for the skill and management required are not easily made available in new centers.

Apart from the United States the greatest increase in capacity and output since 1914 has been among the three major European producers. Germany in 1928 had a leather output of \$225,000,000, England in 1929 of \$200,000,000 and France in 1929 of \$165,000,000—all substantially higher than the pre-war output. Despite many small establishments in Germany there is a good deal of concentration, twenty-two tanneries producing over 40 percent of the output. Fully as much as in the United States the European producers are affected by excess capacity. The result has been an intensified struggle for foreign markets. Germany is the largest exporter, its foreign sales averaging \$60,000,000 yearly in the period prior to 1929, and large amounts of German capital are invested in for-

eign tanneries. French exports, averaging \$37,500,000 yearly from 1927 to 1929 are widely distributed and consist mainly of quality leathers. Although struggling actively for foreign markets England is still a large importer. American exports after reaching a temporary and very abnormal peak of \$218,783,000 in 1919 declined precipitately in the subsequent years and in 1929 amounted to \$42,000,000, compared with \$38,000,000 in 1913. Exports of certain kinds of leather, notably kid and patent, continue very important; the loss has been chiefly in sole leather. The world trade in leather in 1929 amounted to \$250,000,000; 50 percent was in the hands of Germany, England and France. The United States exports about 10 percent of its leather output, the major European producers 25 percent.

The competition of European leather in the United States, long insignificant, has recently been of greater importance; and in 1930 it was made the reason for the reimposition of import duties on the principal shoe leathers. The chief although not the sole explanation of these inroads has lain in the cheapness with which many relatively small European tanneries, with a labor supply better adapted to a specialized than to a staple product, have been able to supply the now popular novelty upper leathers.

From 50 to 70 percent of the value of leather is in the raw hide or skin. Although many animals and even one or two fish (including dogs and seal) contribute skins to the making of leather, the industry's source of raw materials depends mainly upon the operations of the livestock and meat industries. The United States is among the principal importers of raw materials; one quarter of the cattle hides, one half of the calf skins and practically the entire quantity of goat skins consumed by the American industry are imported. Total imports in 1929 amounted to \$137,000,000, more than three times the value of the exports of leather.

Some of the raw material problems of the American industry which seemed so acute during and just after the war have solved themselves through the diminishing intensity of the demand. Imports of raw hides and skins (except goat skins, which are still all of foreign origin) have fallen off, and the reimposition in 1930 of a duty on cattle hides after seventeen years of controversy had surprisingly little effect. Some European countries, Germany, England and France, are also heavy importers of hides and skins. The need of the industrialized countries

for additional raw material has caused the international trade in hides and skins to be left comparatively free, except as producing countries have imposed export duties for revenue. Import duties on leather, however, have since the war been imposed very generally to a restrictive extent in order to encourage home industry. In recent years the tanning industry has made efforts to improve the quality of the hide and skin supply, to reduce its losses from unsatisfactory material. But the results have been rather meager. With the decline of the wartime and early post-war demand exports of hides and skins from some countries have dwindled or disappeared. This has been a matter partly of inferior quality or preparation and partly of competing local demand. The modern shoe industry has reduced the waste in the utilization of leather; but except from 1915 to 1920 it can hardly be said that this problem has been an outstanding one.

JOHN R. ARNOLD

LEATHER PRODUCTS. The boot and shoe industry is the most important of the group of industries manufacturing leather products; it absorbs approximately 90 percent of the leather consumed in the United States and is of decisive importance also from the standpoint of output, accounting for over two thirds of the value of leather products (Table 1). The slightly

leather products (including home furnishings and toilet articles) is becoming increasingly important in the United States as well as in the major producing countries of Europe and is responsible for the growing output of fancy leathers made from the skins of animals such as the alligator, walrus, lizard, shark, snake, ostrich and porpoise.

All primitive peoples have fostered leather industries and have made numerous leather products even before metal weapons or tools were used. In warm countries a small clout of leather sufficed for clothing; a suit of furred skins was required in coldest regions and one of leather in moderate climates. Since primitive peoples knew no other rope, their tent poles, their clothing and their bundles were tied together by strips of tanned leather or rawhide thongs. They made well tanned skins into shields, helmets, breastplates and slings; fashioned skins into suitable caches for storing food while they were living in tents or on trek; and out of other leather constructed papoose boards, high hunting boots, moccasins and leather strapped sandals. Prehistoric peoples, whether Egyptians or American Indians, often achieved in their leather making an artistic quality which causes highly civilized people today to marvel at their skill.

In the ancient Mediterranean civilizations a high degree of artistry and output was attained in the making of sandals, shoes and hunting boots as well as the leather jerkins and greaves for soldiers and field workers. With the coming of class divisions rank and political office among both Greeks and Romans were designated by the color and decorations of footwear. The sandals of both men and women in the upper class families in the late Roman Republic and the Empire were decorated with gold, precious gems and exquisite cameos. The Greeks and Romans used leather in straps for boxing (some of soft leather, some of hard), thongs for spears, harnesses and leather shoes for horses and oxen and portions of armor. Certain quarters in the cities and towns were set apart for the leather workers; sometimes away from the residential districts and near the tanneries, at other times near the market places for the convenience of customers. A Roman shoemaker was sometimes found next to a bookstore, since the parchment rolls which constituted books were tied with leather thongs. These ancient leather craftsmen, highly skilled and jealous of their knowledge, occupied an important civic status; the making of leather products was one of the most prosperous industries

TABLE I
OUTPUT OF LEATHER PRODUCTS IN THE UNITED STATES,
1929

GROUP	NUMBER OF ESTABLISHMENTS	NUMBER OF WAGE EARNERS	VALUE OF PRODUCTS
Boots and shoes	1341	205,640	\$965,922,000
Trunks, suitcases and bags	467	11,359	63,968,000
Pocketbooks, purses and card cases	290	10,430	68,627,000
Gloves and mittens	257	9,203	39,122,000
Belting	207	2,602	35,631,000
Saddlery and harness	260	3,339	23,338,000
Miscellaneous	984	25,910	228,023,000

Source: United States, Bureau of the Census, *Census of Manufactures, 1929: Summary by Industries* (1930).

higher relative value of products other than boots and shoes is due mainly to their variety character; these often require more labor in their manufacture and frequently use other materials in addition to leather. The making of variety

and was responsible for a considerable foreign trade.

During the early Middle Ages craftsmanship in Europe relapsed into the older primitive methods except on the abbey estates and in the monasteries, where much of the skill and learning of the ancient world was kept alive. The Moors, however, who entered mediaeval Europe through Spain, had absorbed and improved upon the most elaborate leather industries of earlier peoples; and even after they had been driven back into Spain and held there, their morocco and cordovan leather was welcomed throughout Europe by aristocrats and merchants. Moorish art and craft were adopted eagerly by mediaeval Europe, even in Britain. Walls were hung with beautifully designed leathers; jerkins and trousers of pliable but almost impenetrable leather were worn by knights and horses under chain armor; leather gauntlets were used by falconers to protect their wrists from the bites and scratches of angry birds; illuminated books for monastery libraries, for lecterns in cathedral chancels and for the prayer desks of princesses were bound in rare leathers and decorated with exquisite tooling in gold. This improvement and refinement in leather products resulted in a sustained effort on the part of all leather craftsmen to maintain high standards. The secrets of the trade were kept with inviolate vows; an increasing sum of knowledge was passed on by masters to apprentices; the demand for better and more beautiful leather products by royalty, clergy and nobility became general; and the guilds of leather workers grew in importance. The leather products of all countries bore a strong resemblance to each other. Hanseatic League merchants, traveling over all civilized Europe in the later Middle Ages, carried with them standards of performance as well as products. Despite the accumulated and assimilated experience of all skilled leather workers for so many centuries little technical advance had been made in Europe up to the sixteenth century; the boot and shoe industry, for example, could not pass beyond the custom stage. Shoemakers' tools like those pictured on a prehistoric Egyptian tomb would have been easily recognized and handled by Hans Sachs, the sixteenth century minstrel shoemaker of Nuremberg. When an English shoemaker set up his shop in Plymouth or Boston in 1650 he used the same essential tools and the same processes as Hans Sachs: four processes—cutting, fitting, lasting and bottoming; and only eight

tools—knife, awl, needle, pincers, last, hammer, lapstone and stirrup.

In the New World the shoemaker and the saddler like the tanner and currier had to adapt themselves to frontier conditions. Industry retrograded to the simplest form possible; i.e. the home stage. The father of each family made up the year's supply of boots and shoes for his family, the harnesses and saddles to be used on his farm, as best he could from leather tanned in his own or his neighbor's bark pit. As the colonists prospered and a sufficient supply of labor allowed some specialization, there appeared the itinerant cobbler, already a familiar sight in England. In the colonial seaports higher standards of workmanship and better leather products soon resulted from guild regulations. The supply of local leather, small and uncertain at first, was considerably augmented by imports of foreign leather. Foreign shoes were also imported, and with them the colonial shoemakers attempted to compete. The shoe industry passed rapidly in such seaports and more thickly settled communities into the stage of custom, or "bespoke," work. At first custom shoemakers undertook only definitely ordered work for known individuals. Gradually, however, in nearly every shop in New England and New Netherland an accumulation of rejected or unclaimed bespoke work was left on the custom shoemaker's hands and had to be disposed of by chance sale, either at a fair or over the shoemaker's window sill. Such work represented a loss, but it presented a suggestion and made a nucleus for "salework" made up without definite order. Out of this developed the practise of regularly organized production for market financed by merchant capitalists, who also undertook to find the markets. The entrepreneur hired men to make up shoes working in their own houses, generally with materials which he supplied. Each worker made a complete shoe and sometimes supplied the tools and materials. Out of this development came a considerable intercolonial and foreign trade with its centers in Boston, New York and Philadelphia.

By 1810 custom, or bespoke, work survived only in the production of high grade, handmade shoes worn by well to do people. Capitalists, encouraged by growing markets, tariff protection and the chance of tempting profits, now engaged in bigger ventures made possible by the new and better organization of the boot and shoe industry. This was characterized by specialization in processes and the rise of the central shop, with work done in the kitchens or the dooryard shops

of the shoemakers, and known now as the domestic or putting out stage. Between 1837 and 1857 there took place another reorganization of production and distribution in the boot and shoe industry. New styles and a greater variety of shoes, made by a few enterprising and ingenious shoemakers who knew the whole trade, were taken over by entrepreneurs who had sufficient capital to exploit the skill and experience of these shoemakers. New and larger markets, both domestic and foreign, were captured for the shoe industry, which manufactured an increasingly superior quality of shoes. Railroads and clipper ships made transportation more adequate and regular, and this very regularity increased the necessity for speed and for standardization of product. Manufacturers' competition retained the keenness which it had assumed in the early 1840's and forced more expert supervision at the central shop in the 1850's. It was gradually seen that economy and skill not only in cutting out shoes but in designing them were necessary in competitive fields. Tin patterns for sole cutting, a machine for stripping sides of leather into sole widths, and better lasts came into common use. During the 1850's straight fits were displaced by rights and lefts, which had been known to the ancients. Variety in widths as well as in lengths and style became desirable, and better packing was introduced.

Hand labor had been dominant about 1837, all sewing on shoe uppers being done by hand and the soles sewed or pegged by hand; twenty years later the uppers of many boots and shoes were being sewed either on the dry or the wax thread machines. Several kinds of pegging machines had been invented for fastening the soles of cheaper boots and brogans. Men went into the central shops to stitch as well as to cut; others followed to tree and to polish the boots and shoes which came back soled from the domestic worker's shop. Larger central shops, known as manufactories, were constructed to care for the increase in both stock and workers in the early 1850's. Agents called freighters were employed by the larger firms to carry cut stock to domestic workers and to collect the finished work. They not only helped to set the required pace for workmen in the dooryard shops, known as "ten-footers," but also kept account of work and wages. Prices for piecework became more generally established, and cash payments were more frequent and regular now than banks were on hand to discount the manufacturers' notes. Increased speed and specialization were necessary

in the bottoming of shoes to keep up with the growing amount of machine work in "fitting" the uppers; and there were organized gangs of rapid experts, who divided the process of lasting and bottoming into minute parts. The modern factory system was developing rapidly.

Meanwhile shoemaking in northern Europe had also been changing slowly but definitely. The growth of national and international economy developed indirect markets for the boots and shoes produced by these workmen. During the seventeenth and the early eighteenth century handicraft, or custom, work, with some extra sale work, had been as prevalent in Europe as in New England and New Netherland, under a similar town economy of production for direct sale to townspeople. Later the English shoemaking industry changed to meet the requirements of its growing domestic and export trade. In the organization of the shoe industry England entered the capitalistic stage later than in the organization of its woolen and cotton industries. Before the eighteenth century was over the "Silas Marners," who had left off spinning and weaving in their cottages to go into textile factories, were being replaced as cottage workers by shoemakers. Both men and women worked under the putting out system for merchant capitalists who anticipated the market with a daring that often yielded spectacular profits. One of them, John Came, a former cordwainer's apprentice, who died in 1796, bequeathed the sum of £37,000 for charity. No customs shoemaker could have done this; only an entrepreneur making boots and shoes in large quantity for foreign trade could meet such business success. By the 1760's in England the distinction was complete between the shoemaker working in his custom shop for his own clients and the wholesale maker. The wholesale producers of boots and shoes bought stock in large quantities and employed many craftsmen to make up the materials sent to them in their homes in hampers or baskets. Gradually shoemaking was taken from the workers' houses into their garden shops, or "crees," which were like the New England ten-footers. New workers were hastily taught to perform their one operation in the making of a shoe. In England as in the United States the system persisted until the 1850's.

France, which had outstripped England in mediaeval times, kept pace during this later period. By the eighteenth century the French tanning processes were superior and the supply of skins was better; even English shoemakers

traveling in France acknowledged that the French boots and shoes were the more comfortable and better fitting. English shoemakers were urged to study and adopt French technique. Like England, France was working in the seventeenth and the early eighteenth century for a wide domestic and export trade in boots and shoes. French shoemaking had always been a flourishing industry, and French kid shoes for women and calf boots for men were welcomed in many countries and had few rivals. From the earlier custom shops their manufacture had passed into the hands of entrepreneurs working for the wholesale trade, organizing production under the domestic system. French handwork was supplemented by a few hand power machines even before the advent of sewing machines for uppers and in 1863 of the Blake sewing machine for soles.

Both Germany and Austria lagged behind France and England in developing a modern boot and shoe industry and in adjusting their manufacture to national and world economy. At the beginning of the twentieth century many German shoemakers as well as toy manufacturers, wood carvers and lace makers were working under the putting out system of manufacture, but thereafter the German boot and shoe industry was rapidly modernized.

It was in the United States that the boot and shoe industry was first revolutionized by intensive mechanization. The rise of the factory system had begun in the central shops with the supervision of the stitching on the uppers, of the lasting and finishing of the assembled shoes when they were brought back to be treed, polished, crowned and packed. Such supervision, which increased in both amount and directness in the new manufactories, was the less obvious but more vital characteristic of factory production. A more obvious but far less important attendant characteristic was the change to these larger buildings, where machinery run by hand, foot or water power could be better accommodated and which provided more office space and greater storage facilities for uncut stock and cases of completed boots and shoes. Larger amounts of capital, fixed and circulating, were now necessary as the capitalist controlled the whole process of production and not, as was formerly the case, merely the marketing.

The gangs of expert bottomers, who sewed on soles by hand, had already demonstrated that the limitation of each worker to a small part of the labor process makes possible greatly increased

production. Yet the speed gained by the subdivision of labor on the soling processes was not commensurate with the pace made possible by machinery in fitting and lasting the uppers. Various kinds of pegging machines with wood, brass or wire pegs had been invented and were in constant use for the coarser shoes, which were too rigid to be comfortable. The better shoes had still to be soled by the slow hand process using the awl and waxed thread as among the ancient Egyptians. Equilibrium in speedy production could be achieved only by the invention of a machine to stitch soles to uppers. Lyman Blake of South Abington, Massachusetts, invented such a machine to be run by foot power and patented it in 1858. When further experiments, new models and new patents threatened to exhaust Blake's capital, he sold the machine in 1859 to Gordon McKay, who thereafter (from 1861 to 1872) employed him at good, regular wages. Blake had kept the rights to his foreign patents; and in Europe his invention, always called the Blake machine, was set up in all progressive shoemaking centers during the 1860's. He did not realize any very large profits from his inventions. McKay made several improvements in the Blake machine, until finally a lasted shoe put on the iron horn, which carried inside itself a waxed thread, could be stitched around the edge of the sole firmly from heel back to heel. The capacity of the sole stitching machine was increased from 600 to 1200 pairs a day. Stimulated by contracts from the United States government during the Civil War the number of McKay machines in use increased, until by the end of 1863 there were in operation a total of 200, which had stitched 2,500,000 pairs of shoes. By 1870 over 25,000,000 pairs had been stitched and the "McKay shoe" was well known wherever boots and shoes were made in factories. In 1862 McKay announced his policy of renting and servicing his entire output of machines on a royalty basis and attached an automatic counter to each machine to keep the tally of pairs stitched and of the corresponding royalty which should be paid.

Although many inventors continued to work on other soling machines after the success of the Blake invention, no machine of equal importance for the soling of shoes appeared until the Goodyear Welt was put on the market in 1875. For uniting the sole to the upper in a substantial way, thus making for both comfort and good appearance, there had never been any process so adaptable as that of sewing a welt strip to the

upper and inner sole and then stitching the outsole to this welt. Until 1875 the only method had consisted of awl and waxed thread, bristle and skill. Goodyear invented its rival in the form of a speedy welt sewing machine, which came to be used wherever a higher priced machine made shoe was in demand. The Goodyear Welt was in part the result of McKay's success and in part the result of inventions made by Auguste Destouy in 1862 and improved by Daniel Mills after Charles Goodyear had bought up the rights and patents.

After these two machines, of such fundamental importance to the shoe industry, had come into general use, there appeared an imposing array of other machines to keep pace with them and to link up the processes: heeling and lasting machines, channeling and rough rounding, leveling and edge trimming, eyeleting and buttonholing machines. Many shoe machinery companies were buying up inventions, manufacturing their own machines and fighting the claims of others. Much money and effort were wasted in litigation and in loss from "defeated machines." The rivalry was ended in 1899 by the organization and accepted domination of the United Shoe Machinery Company, which combined three of the largest but non-competing shoe machinery companies and in less than fifteen years was manufacturing and leasing over 550 different essential and auxiliary machines. The leasing of shoe machinery had been temporarily abandoned after the expiration in 1880 of the original McKay patents and extension; in the resumption of the practise by the United Shoe Machinery Company the royalty system and the servicing of all machinery have been two fundamental principles. The company, now incorporated, has been charged with monopoly and legal efforts have been made to destroy its leasing system, but it still supplies shoe factories all over the world on a royalty basis.

The American shoe industry was completely mechanized within an incredibly short time. By 1890 custom shoe shops had become unimportant; they survived alongside the factories, but the value of their output was small. Each year's refinement of factory, or ready made, shoes, especially after comfort and good finish were secured by the use of the Goodyear Welt, made the existence of the custom shops more precarious. Moreover it required no more capital to equip a small factory with leased machinery than to set up a custom shoe shop. At the same time there took place a definite localization

of the shoe industry. In 1860 New England was producing \$91,891,000 worth of shoes, 60 per cent of the American output. The middle Atlantic states had an output of about one quarter that of New England and made shoes of finer quality. In all the New England centers of production there was considerable local specialization; thus Brookfield specialized in brogans for rough wear, Randolph in fancy high boots, Lynn in women's shoes, various towns in men's shoes and so on. Specialization developed also in the Philadelphia and New York centers as well as in the new shoe centers of the west, which arose first in Ohio, then in Chicago, St. Louis and Wisconsin. The older centers began to feel the western competition; although New England continued to maintain its lead—in 1905 it still produced more than half of the American output of boots and shoes—this lead began to decline perceptibly; production in the middle Atlantic states also declined, while the western centers gained.

Of great importance in the growth of the boot and shoe industry from 1875 to 1900 was the use of steam and electricity for motive power. As early as 1870 motive power had come into use in a few factories in the form of steam engines and water wheels; by 1900 not only was power more extensively used, but electric power had already begun to be substituted for water or steam power. In the new factories of the west the industry was using relatively more electric power and using it more uniformly than in the older factories of the east. The proportion of establishments reporting use of motive power in the boot and shoe industry rose from 65.5 percent in 1890 to 84.8 percent in 1905, while there was a gain of 131.5 percent in the use of electric power from 1900 to 1905.

The growth of concentration in the industry was shown in the census returns for 1880. While the number of operatives increased to 111,152 and the value of output to \$166,050,000, there was no appreciable gain in the number of factories and firms, which numbered 1959, although the population of the United States had grown 30 percent. By 1900 the number of manufacturing firms had declined to 1522 and by 1913 to 1355. The years from 1875 to 1900 saw the rapid introduction of more elaborate office systems as a result of increasing mechanization, concentration and output. Records and filing cases, loose leaf ledgers and shipping sheets took the place of bound account books. The number of salaried office employees increased steadily. As

invested capital and overhead increased there was a corresponding increase in production, distribution and concentration.

Cultivation of the export trade was an important factor in the tremendous growth of boot and shoe production in the United States between 1875 and 1900. This new export of shoes was the deliberate policy of the largest shoe firms to find wider markets for their constantly enlarging output. During the American Civil War England had secured the shoe market in the southern states; English ships ran the blockade to land their cargoes of boots and shoes. In 1866 the total value of American shoe exports dropped to almost zero, but by 1870 there had set in a revival, which was followed by a fairly steady increase. The export of 276,179 pairs of shoes valued at \$419,612 in 1870 had risen to 5,315,000 pairs valued at over \$8,000,000 in 1905. This increasing American export trade aroused severe competition from European producers, whose home and foreign markets were being invaded and who consequently began to adopt American production methods.

The chief competitor of the United States was England. In 1870 English exports of boots and shoes were valued at approximately \$7,000,000, those of the United States at less than \$500,000. Under pressure of American competition and other economic factors the English industry was rapidly mechanized during the 1880's. Specialization and concentration accompanied its localization at Leicester and Leeds, Northampton and Norwich, London and Kettering, Stafford and Bristol; in 1910 at Leicester alone there were employed 25,000 shoe workers producing an output of \$20,000,000. Between the years 1905 and 1913 the British manufacturers greatly improved both productive efficiency and the style and finish of their shoes, and Great Britain became the world's largest exporter of footwear. At the same time it imported large quantities, of which approximately one half were from the United States.

The pressure of American competition in their own markets forced many European manufacturers to adopt the new American shoemaking machinery. The necessity of importing machinery from the United States and the exactions of the leasing and royalty system led to the development of European shoe machinery. A number of firms manufacturing shoe machinery arose in England, and their attempts to capture the market were aided by legislation nullifying the policy of the American shoe machinery monop-

oly of selling machines on condition that the buyer purchase all other shoe machinery from the same source. Nevertheless, up until the World War England was still buying the bulk of machinery from the British United Shoe Machinery Company, a branch of the American concern. A number of manufacturers of shoe machinery arose also in France and Germany, lessening the dependence on American imports. A modern shoe industry thoroughly mechanized and specialized developed both in Germany and in France, although very many factories of the older type existed alongside the highly mechanized concerns. The largest shoe factory appeared in Switzerland, and Swiss exports became important. Austria-Hungary, while continuing its famous production of beautiful handmade evening shoes, specialized in the production of cheap coarse shoes in the mechanized factories. Nevertheless, although American production methods and American machine made shoes were increasingly imitated by European countries, the importation of shoes from the United States continued large for many years.

The American shoe industry did "billion business" during the World War. Europe furnished unprecedented demands for both war and civilian boots and shoes. The French government alone placed an order for 500,000 pairs of army shoes with one New England firm. Since in the field the average life of a pair of shoes was one month, constant replacement and increasing production were necessary. In 1915 it was estimated that 15,000,000 pairs of army shoes had been shipped to Europe by the United States since the opening of the war, besides the unusually large American exports to British colonies, the East Indies, the Dutch Indies, South Africa and South America. In 1916 exports rose to \$42,524,000 and to \$74,836,000 in 1919, although the latter figure was affected by rising prices; imports were negligible. War had practically eliminated foreign competition, and American manufacturers practically monopolized the field of world trade in boots and shoes. The entry of the United States into the war again increased production; in the year 1917 the American government contracted for 12,000,000 pairs of shoes. During the war American shoe factories not only operated at full capacity but added considerable floor space and machinery, and the relatively small capital requirements encouraged the opening of new factories.

American production, high in 1919, slumped seriously in the depression of 1921 and revived

in 1923. Thereafter it remained relatively constant (Table II) despite the great expansion of most other industries. There was a considerable decline in the number of establishments in comparison with the war and the early post-war period; and while establishments in 1929 numbered nearly as many as in 1914, concentration increased because of the growth of larger enterprises. There were also changes in the geograph-

TABLE II

GROWTH OF THE AMERICAN BOOT AND SHOE INDUSTRY,
1914-29

YEAR	NUMBER OF ESTABLISHMENTS	NUMBER OF WAGE-WORKERS	VALUE OF OUTPUT
1914	1355	191,555	\$ 502,000,000
1919	1449	211,049	1,155,000,000
1923	1606	225,216	1,000,000,000
1925	1460	206,992	925,000,000
1927	1357	203,110	945,000,000
1929	1341	205,640	965,000,000

Source: United States, Bureau of the Census, *Biennial Census of Manufactures, 1921-22* (1924, 30), and *Census of Manufactures 1929: Summary by Industries* (1930).

ical distribution of the industry. The three most important producers were Massachusetts, New York and Missouri; Massachusetts for October and November of 1931 temporarily even lost its lead because of its relative slowness in making the transition to the production of lower priced shoes. The stationary and even slightly declining output in all the shoe centers combined with an enormous excess plant capacity to increase competition and lower profit margins, making boots and shoes one of the "sick industries." The situation was aggravated by the extremely slight rise in productivity in contrast to nearly all other industries; while productivity rose 24 percent from 1914 to 1927, productivity was almost stationary after 1923. This was due primarily to the fact that production was already highly mechanized and that the leasing system discouraged the manufacture of more efficient machines. The aggravation of competition led to many efforts to conserve and increase profits. Some companies employed cheaper and less experienced non-union labor; others intensified the mass production of new types of boots and shoes for chain store distribution, increasing sales by advertising widely even the cheapest shoes. The number of tie ups between shoe manufacturers and chain stores increased greatly. At the same time manufacturers, both individually and collectively, emphasized "style appeal" in advertising and publicity, endeavoring to

make men and women "shoe conscious" in order that they should buy new shoes before the old ones wore out. The industry had to counteract the two great modern forces which have tended to prevent shoes from wearing out: the use of automobiles and the wearing of rubber overshoes to protect thin and lightly constructed footwear.

The effects of relatively declining demand were aggravated by the falling off of American exports. Foreign countries (except England) increased their tariffs on imported shoes, practically barring American exports; at the same time the sale of foreign shoes in the United States, particularly by Czechoslovakia, led to the imposition in 1930 of a tariff of 20 percent on leather shoes, which was raised to 30% in 1932. The American export of boots and shoes has steadily declined (Table III). Exports in 1929 were not only lower than during the war, they were also lower than in the period from 1910 to 1914 and considerably lower than in 1923. American shoe exports in 1929 amounted to only 1.3 percent of total production. While exports declined, imports increased: the imports of women's shoes rose from 115,000 pairs in 1923 to 2,018,000 pairs in 1928. Of these 1,507,000 pairs came from Czechoslovakia. Competition—not only for the United States but for other countries as well—came in its most acute form from Thomas Bata, the dominant shoe manufacturer of Czechoslovakia, who had adopted the most modern methods of manufacture. His army shoe business expanded his capital and experience during the war, and in the post-war period he improved his plant on the basis of high speed

TABLE III

AMERICAN EXPORTS OF BOOTS AND SHOES, 1910-29

YEAR	NUMBER OF PAIRS	TOTAL VALUE
1910-14 (average)	9,043,000	\$15,788,000
1921	8,957,697	24,678,000
1923	7,342,000	17,517,000
1924	6,299,000	15,071,000
1925	6,604,000	15,319,000
1926	5,707,000	12,853,000
1927	5,513,000	12,490,000
1928	4,319,000	10,858,000
1929	4,281,000	11,409,000

Source: *Statistical Abstract of the United States*, for 1910-29.

mass production accompanied by efficient plant layout and the most modern methods of management. He developed an original system of distribution, barring out middlemen. Despite the world depression the Bata works at Zlin in October of 1931 produced 165,000 pairs of shoes daily, the work of about 32,000 employees.

Bata's expansion was based upon an energetic cultivation of foreign markets.

In Germany and France also there took place a tremendous increase in the output and quality of shoes accompanied by increasing mechanization, specialization and concentration. In the three major producing countries of Europe as well as in the United States the problem of excess capacity has grown more acute; thus in 1928 the 1000 shoe factories in England had a combined capacity of nearly 130,000,000 pairs yearly, while their actual production was not much over 110,000,000 pairs. English exports have increased while imports have declined; in 1928 imports were only one third of the £5,000,000 of exports. But many of England's best markets, such as South Africa, New Zealand and Australia, are developing their own shoe industries; and Australia has already imposed tariffs upon imported shoes. The excess capacity in all the major producing countries, combined with increasing domestic production in the smaller countries and rising tariff barriers, is greatly intensifying the competition for foreign markets and the problem of excess plant capacity.

Leather products other than boots and shoes are increasing in importance. While the American shoe output declined from \$1,000,000,000 in 1923 to \$965,000,000 in 1929, the output of other leather products rose from \$404,000,000 to \$468,000,000. Mainly because of the variety and variegated character of these other leather products their manufacture is usually performed by small scale enterprises, with comparatively little concentration. Whereas 1341 boot and shoe establishments produced in 1929 an output of \$965,000,000, half this output in industries manufacturing other leather products required the activity of 2465 establishments.

While shoes and saddlery have always been considered necessities, most other leather products have been thought of as belonging to the order of comforts and luxuries. Moors and mediaeval knights hung the cold stone interior walls of their castles with decorated leather and sometimes put leather covers on chair backs and seats, but it was left for the modern age to use leather generally for furniture covering and carriage cushions. Purses were formerly made of silk for the rich but of leather for the masses. English travelers for centuries prided themselves on their luggage of tan colored sole leather, while riders of many countries and centuries took pleasure in their saddles, plain or ornamented but always well made. Machinery has allowed

these former luxuries to be considered articles of common necessity. There has been a steady interchange of tools and stitches as well as of leather secrets between the saddlers, shoemakers and bag makers. Each country has made its own adaptations to its climate, uses and needs. When the English saddle was not considered practicable for the western plains of the United States, the American horsemen asked for a long skirted and pommeled saddle. Dry and wax thread machines were tested in work on baggage and harnesses about the same time as in that on shoe uppers, but the saddlery and other leather trades lagged behind the shoe industry in the use of machinery and factory organization. Harness shops, previously often combined with bag and trunk shops, separated when the saddlery trade was organized on a factory basis. The growing use of harness and collars for draft horses in the American west and south and the increased use of light harnesses for horses hitched to wagons and buggies encouraged an indigenous saddlery industry in the second half of the nineteenth century in the United States, enormously reducing imports. High class English saddlery, however, continued to find an American market, although at luxury prices.

Not until the 1860's were the advantages of factories over small shops for the saddlery industry clearly seen. Prejudice against the first wax thread chain stitch sewing machine was so great on the part of workers that even the manufacturers who could see its benefits in lowering their cost of production did not use it until years after its advent. In addition to the sewing machines a leather creasing machine finally helped decisively to industrialize saddlery production because of the need for speed and greatly increased output to meet the demand engendered by the use of buggy harnesses. After the 1870's with decrease of labor under the factory system there existed no harness makers but only harness machine operators. Machines for the saddlery trade were leased upon payment of a bonus and a "rent" of five cents for each one thousand stitches. Later a monthly rental was common.

Few harness factories and harness repair shops have survived the common use of the automobile in the United States and many European countries, and the industry has lost all its old importance except in Latin America, Asia and Australia. But the demand for leather in the making of automobile cushion covers and trimmings has greatly surpassed the earlier carriage demand, although the introduction of the closed car rela-

tively decreased the demand for leather by the substitution of fabric upholstery. The manufacture of automobile fittings has so often been combined with that of leather findings for shoes that it has become a usual accessory in old firms or the welcome and dominant factor in new firms.

The manufacture of leather belting for wheels transmitting power in factories has seriously declined, mainly because of the increasing use of direct drive where electric motors are used; and firms manufacturing belting have been forced into the production of new items. Meanwhile the United States, which formerly imported most of its gloves from France, Italy and England, has developed an important glove making industry. This industry, except for the homemade leather and fur mittens of American Indians and Eskimos, is only seventy-five years old. It is now spread from New Hampshire homes to California factories, but the chief center is still Gloversville, New York, where the industry originated. Specializing first on heavy buckskin, cured in nearby tanneries, the Gloversville manufacturers are now using many kinds of leather from many parts of the world. For gloves designed for street wear they use goat, kid and lamb; for heavier gloves, antelope, calf, mocha (Egyptian sheep) and cabretta (South American kid). Reindeer skin and colt skin are used for dress gloves. Formerly labeled with foreign brands, the Gloversville products now go on their own merits. Probably more than four fifths of all the leather gloves used in the United States are domestic goods, imports consisting mainly of finer lightweight gloves from Europe. In recent years the manufacture of leather coats has acquired considerable importance. Luggage manufacture has expanded, stimulated partly by the growing tourist habits of Americans. The manufacture of novelty leather goods is increasing rapidly, with heavy demands upon fancy leathers.

The manufacture of leather products in the United States and most other countries is already protected by tariffs, but the industries are demanding higher duties. International competition grows keener. But the American industry is still almost exclusively dependent on home markets, although striving actively to promote exports.

BLANCHE HAZARD SPRAGUE

LABOR. Leather workers in former ages occupied an important place in the craftsmen's hierarchy. Today very little of the craftsman's skill

and prestige remains, and leather workers are mainly ordinary machine and waged workers. In many economically undeveloped parts of the world there are still leather craftsmen. They may also be found in modern countries; German, Austrian and Italian craftsmen still work on beautifully colored leathers, tooled with pure gold leaf, producing such luxury articles as carcases, book covers, cases for toilet articles and travel equipment. But these products are increasingly imitated by machine goods, and even in the economically backward countries leather craftsmen are being routed by the competition of cheaper manufactured wares. Some remnants of craft skill still persist in the manufacture of variety leather products, but it has no existence whatever in the completely mechanized production of boots and shoes. The history of the shoemaker offers one of the most striking illustrations of the suppression of the craftsman's skill by machinery.

Shoemakers were not only skilled craftsmen; they were long the theme of song, story and legend. In ancient Athens shoemakers as well as tanners came within the range of Aristophanes' apt description. The leather workers of Rome were proud of their craft and many of them rose to positions of importance not only in their guilds, where they made rules for masters and apprentices, but also in larger spheres of government. Lucius and Martial mention individual shoemakers; and Alfenus, the shoemaker lawyer of the Augustan age, had firm friends, it is said, in Vergil, Horace and Catullus. In Christian Rome at least two shoemakers became bishops; while others, like St. Hugh, St. Crispin and his brother St. Crispianus, are glorified as martyrs and saints in the tales of mediaeval shoemakers. The guilds of leather workers were highly organized during the late mediaeval and early modern periods. Each leather craft had its guild, its song, its coat of arms, its patron saint and its rules and regulations for masters, journeymen and apprentices. Dire punishment came to the sellers of bad ware; to the craftsmen, whether tanners, saddlers, shoemakers or clothiers, who passed off poor work or inferior stock. Charters gave artisans their special privileges and responsibilities. Cities and towns of Italy, France, Germany and England assigned special quarters to leather workers, who had their own guild-halls, where banquets were served, and their own chapels for religious and memorial services. Every leather workers' craft was represented in the miracle plays, and all were given their spe-

cific duties in civic spectacles and processions. Shoemakers acquired a peculiar, almost legendary reputation. Shakespeare introduced shoemakers and their philosophy into *Julius Caesar*. Simon Eyre began his career as a shoemaker's apprentice and became mayor of London and donor of the market hall and chapel for London's shoemakers; while many of the artists, teachers, poets and preachers of the sixteenth and seventeenth centuries had formerly been shoemakers.

Most of these conditions passed away with the rise of the domestic system and the central shop for the production of shoes. By the 1760's the distinction in England between the shoemaker, working in his custom shop for his own clients, and the domestic worker was complete. Disputes arose as to whether shoemakers who had not been apprenticed to regular shoe masters could work as apprentices or domestic workers. The question was settled, not by restrictive legislation, such as the Weavers' Act of 1555, but by the great scarcity of shoe workers. The domestic system made enormous inroads upon the older craftsmen and their skill. Young children were pressed into service to make balls of wax or wax ends or to close the uppers of children's shoes; they worked long hours, often by candlelight. The children's elders strenuously objected, in the name of "liberty," to the increasing supervision and speed made necessary by competition in markets for uniform products and by the regular sailings of vessels with shoes for foreign ports. The treatment of workers in the central shop of Billy Jones of Northampton, England, who docked their wages if he was dissatisfied with the boots and shoes, was typical of the new conditions which prevailed in shoemaking. Conditions under the American domestic system were similar. Each man, woman and child working for the central shop in his own kitchen or dooryard shop devoted himself to one process or specialty. Children, both boys and girls, mothers and older daughters fitted or bound the edges of the uppers and closed or seamed them up at sides or back. Men lasted and then soled the boots and shoes, a process known as making or bottoming. Small girls could stitch the pull on straps for the sides of the boots; small boys could feed the stove with leather scrap, get pails of water for cooling edge irons, cut lengths of threads for sewing on uppers or soles. Children had no hope of play before their stints were satisfactorily performed. Shoemakers were becoming simply shoe workers, who could perform one process speedily and skilfully.

The earlier machines functioned mainly as an aid to the shoe worker; they did not displace his skill. But the machinery introduced by Gordon McKay and others deprived the worker of his skill and transferred it to the machine. This change was swift and complete. Machines were devised for all shoemaking operations, which were highly specialized on the basis of minute subdivision of labor. As machines improved and became increasingly specialized, skilled operatives were displaced by unskilled workers receiving lower wages; operatives ceased being shoemakers who expected high pay. Hundreds of different specialized processes are involved in making a pair of shoes; and shoemaking is today, in both the United States and Europe, one of the most highly mechanized and specialized industries. Even the small shoemaker's repair shop is disappearing in the United States with the rise of chain shops using elaborate machinery in the repairing of shoes.

The impact of machinery, which displaced skill and lowered wages, aroused American shoe workers to revolt in the late 1860's. They had early organized unions; nine out of seventeen conspiracy trials up to 1842 affected shoe workers. In 1859 women workers struck against the introduction of sewing machines, which were taking work away from the home. The Knights of St. Crispin, an organization of shoe workers which flourished from 1868 to 1870, had a membership of 40,000 to 50,000 and was the largest union in its day. It waged and won many strikes, mainly against wage reductions and the teaching of "green hands," but collapsed after the organization of employers led to the loss of strikes. Unionism among the shoe workers, however, revived in the Knights of Labor, as a result primarily of more extensive and accelerated mechanization. The shoe workers were extremely important in the Knights of Labor and provided some of the organization's most outstanding leaders. The Knights waged an important shoe strike and boycott in 1878. Never since have the American shoe workers in general been so thoroughly organized; mechanization and specialization have destroyed their solidarity.

After 1889 the most important organization was the Boot and Shoe Workers International Union, affiliated with the American Federation of Labor, but it never acquired any real strength except in Massachusetts. The tendency to organize separately the workers of each department in a factory was abandoned; but the Boot and Shoe Workers Union absorbed and federated

unions of all kinds of shoe workers, i.e. stitchers, lasters, cutters and so on. Arbitration became a settled policy in the Massachusetts shoe factories after the Brockton strike of 1907 to 1908. There have been many small strikes in the industry, but labor organization and collective bargaining are relatively and increasingly unimportant except in Brockton, which is still the most highly organized shoe labor center. The employers are organized in the National Boot and Shoe Manufacturers Association. Frequent local strikes have been carried on by unorganized workers or by workers organized in the Industrial Workers of the World and in communistic unions; radical unionism, however, cannot yet be said to have any considerable hold over the boot and shoe workers.

An interesting experiment in labor relations took place in Haverhill, Massachusetts, where the Shoe Workers Protective Union (although extremely weak in all the other shoemaking centers) maintained a strong organization. As the industry was declining because of the high labor differential in comparison with other centers, the union and the employers set up in 1924 a permanent board of arbitration. The board reduced wages from 10 to 33 percent and removed all rules "hampering managerial efficiency." This lowering of labor standards was accepted by the union officials, often against members' protests, in the hope of saving what little it was possible to save. For a time an impartial chairman, or "czar," determined labor relations. The Haverhill experiment was not very successful as it evaded the problem of unionizing the other shoemaking centers.

Irregular employment among shoe workers has increased greatly in recent years because of stationary demand and increased capacity. The industry's overcapacity is large; in 1927, 14.5 percent of the shoe factories, which employed 60.4 percent of the shoe workers and produced 65.7 percent of the industry's output, if operated at full capacity could have produced 95 percent of the total output of all shoe factories. Large numbers of shoe workers were unable to secure steady employment.

Conditions are in general similar in the European shoe industry; but the unions are somewhat stronger and irregular employment is mitigated by unemployment insurance. The Bata shoe plants in Czechoslovakia, however, prohibit union organization and impose on the workers an ironclad "welfare" system, but state law provides unemployment insurance.

Unions on a small scale also exist in other branches of the American leather industries, for example, among the pocketbook makers, where there is considerable hand labor. Because of the dispersion of many tanneries in small communities the organization of unions has been difficult, and they have existed only here and there; it is possible that conditions are beginning to change in this respect. Unionism is much more highly developed in Europe; in Germany in 1928 the majority of the 42,000 tanning workers were unionized.

Because of the extremely varied character of the leather industries generalization about wages is difficult. Workers in American tanneries in 1929 had the highest average yearly earnings of those engaged in the three major branches of the leather industries—\$1270, about the same as the average for manufacturing as a whole; yearly earnings, however, were not much higher than in 1923 despite an increase in productivity of 20 percent for the tanning industry as a whole and 30 percent for the more progressive companies. The next highest average, \$1170, was that of the workers producing leather products other than boots and shoes; certain groups of workers in certain branches have relatively higher earnings. Workers in the boot and shoe industry had the smallest yearly earnings—\$1080; this represented a decline from the average of \$1110 in 1923, indicative of the wage reductions which have taken place in the industry, and is considerably lower than the average earnings of the great majority of American workers.

Working on leather has always been dangerous. Occupational hazards are particularly great in the tanneries, which, according to a government report in 1919, have been "conspicuously backward in accident prevention." Some progress, however, has since been achieved. Accidents are due to machines and open vats. Occupational diseases are very prevalent: anthrax from handling impaired hides; skin diseases from the sharp cutting edges of hides; poisoning from various chemicals used in tanning; tuberculosis, rheumatism and catarrhal affections from dust and moisture; and other poison hazards where leather is dyed, japanned or enameled. In the boot and shoe factories in addition to accident hazards from machinery, such as punctures from stitching needles and cuts from groove cutting on revolving knives, there is danger of anthrax and other occupational diseases. Similar hazards prevail in the industries making leather products other than boots and shoes. These occupational

hazards can be enormously lessened by proper preventive measures, such as safeguarded machinery and proper lighting and ventilation. The American industries are backward in prevention work; greater protection is provided leather workers in Germany, France and England, who are in addition protected by social insurance.

BLANCHE HAZARD SPRAGUE

See: MECHANIC; GUILDS; JOURNEYMEN'S SOCIETIES; TRADE UNIONS; INDUSTRIAL REVOLUTION; INDUSTRIALISM; MACHINES AND TOOLS; PATENTS; INDUSTRIAL HAZARDS.

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LE BON, GUSTAVE (1841-1931), French publicist and social psychologist. Although Le Bon, who was trained as a physician, had interests which included public hygiene, theoretical physics, archaeology and physical anthropology and was for some time editor of the *Bibliothèque de philosophie scientifique*, he is best known for his writings on social psychology and contemporary public affairs. Accepting Gobineau's emphasis on the importance of the concept of race in the evolution of civilization he espoused the doctrine of a racial hierarchy in which the white races were at the top and the Negroes at the bottom of the scale. He adopted the romantic notion of national character and the doctrine of the racial soul and considered emotion rather than intelligence to be the determining force in history and culture; this emphasis although extreme helped to correct the excessive intellectualism of the prevailing Benthamite psychology. With a decidedly aristocratic and anti-democratic bias he held the masses to be devoid of reason, popular government to be mob rule and all the important achievements of civilization to be the work of the élite. At first he maintained that the Teutonic and Anglo-Saxon peoples possessed real political genius while the Latins were prone to mob dominion. With strange disregard for facts he also held that the Anglo-Saxons and Teutons were characterized by *laissez faire* political ideals, which he favored, and the Latins by socialistic tendencies. The World War led him to reverse his position completely; the Latins now possessed the unique political genius and were whole heartedly devoted to individualism, while the Teutons were portrayed as decadent devotees of state social-

ism. Le Bon vehemently condemned revolutions as products of mass hysteria.

In his most popular work, *La psychologie des foules* (Paris 1895, 29th ed. 1921; tr. as *The Crowd*, London 1922), Le Bon held that as a result of the industrial revolution, the rise of modern cities and modern communication life is coming to be characterized more and more by crowd assemblages. Le Bon looked upon crowds as organized aggregations in which the conscious individualities of the assembled persons are virtually lost and in which the subconscious minds of the participants merge and dominate the situation. He pictured a crowd mind which sinks to a common mediocrity, is highly suggestible and is capable of great heroism or incredible savagery, depending upon the motive and leadership. He contended that ideas once implanted in a crowd, primarily by reiteration, spread rapidly by contagion. Le Bon's many books on sociology and public affairs, of which *Aphorismes du temps présent* (Paris 1913) is a good summary, were marked by almost incredible reiteration. His versatility resulted in some superficiality.

HARRY E. BARNES

Consult: Barnes, H. E., "A Psychological Interpretation of Modern Social Problems and of Contemporary History: A Survey of the Contributions of Gustave Le Bon to Social Psychology" in *American Journal of Psychology*, vol. xxxi (1920) 333-69; Belot, Gustave, "Gustave Le Bon" in *Revue philosophique*, vol. xlviii (1899) 182-90; Rageot, Gaston, "Portraits d'écrivains: Gustave Le Bon" in *Revue politique et littéraire*, vol. lix (1921) 307-11.

LECKY, WILLIAM EDWARD HARTPOLE (1838-1903), Irish historian. Lecky was born near Dublin, Ireland, of Protestant parents. He was educated at Trinity College, where he became greatly interested in history. An individualist in political philosophy, a rationalist in religion, a Liberal in politics, a fine scholar and trenchant writer, Lecky was admirably fitted to give an interpretation of history that would appeal to the triumphant middle classes of Victorian England.

The appearance of his *History of the Rise and Influence of Rationalism in Europe* (2 vols., London 1865; new ed. 1890) and *History of European Morals from Augustus to Charlemagne* (2 vols., London 1869; 3rd ed. 1877) won for Lecky immediate renown as a philosophic historian. These volumes occupy an important place in the movement to interpret history in terms of ideas and beliefs. Lecky was a convinced, almost

dogmatic rationalist, and the leading theme of these books is the warfare between reason and theology. *European Morals* is a discussion of the morals of pagan Rome and of the rise of Christianity. *Rationalism in Europe* describes the decay of theology and the advance of rationalism until its triumph in the eighteenth century. Neither book, however, contains original knowledge, and the philosophy that inspired them is now trite and commonplace.

Lecky's magnum opus is *History of England in the Eighteenth Century* (8 vols., London 1878-90; new ed., 7 vols., 1892), a work that has not as yet been entirely superseded. It is primarily a political history with extensive chapters on the social, economic and religious aspects of the period. As a whole it is a product of original research and sober judgment. The style is dignified, lucid and elegant. What it lacks is animation; at times the book becomes dull and platitudinous. Some of its outstanding features are the volumes devoted to Ireland, the chapter on the American Revolution and the chapter on the Wesleyan religious revival.

Lecky was actively interested in public affairs. In politics he was a moderate and cautious Liberal, and his ideal government was that by a parliament elected by the propertied classes. He was opposed to the extension of the franchise, to social legislation, to Irish land reform and to home rule for Ireland. His book *Democracy and Liberty* (2 vols., London 1896; new ed. 1899) consists of a discursive series of essays on public affairs in which he makes every effort to show his dislike and distrust of democracy. In the war against the feudal, theologic order he was a doughty champion of reason and liberty. When this was won and the new struggle began for democracy and social reform, the calm judicious historian became frightened and confused. *Democracy and Liberty* was the subject of a scathing criticism by John Morley (in his *Miscellanies, Fourth Series*, London 1908, p. 169-216).

J. SALWYN SCHAPIRO

Other important works: *The Leaders of Public Opinion in Ireland* (London 1861; new ed., 2 vols., 1903); *The Map of Life* (London 1899); *Historical and Political Essays* (London 1908, new ed. 1910).

Consult: Rhodes, J. F., *Historical Essays* (New York 1909) p. 151-58; Lecky, E. van D., *A Memoir of the Right Honorable William Edward Hartpole Lecky* (London 1909); Gooch, G. P., *History and Historians in the Nineteenth Century* (2nd ed. London 1913) p. 365-69; Fueter, E., *Geschichte der neueren Historiographie* (Munich 1911) p. 480-81.

LECLAIRE, EDMÉ JEAN (1801-72), French industrialist. Leclair, the son of a village shoemaker, began his career as a house painter. By severe economies he was enabled to rent a small Paris shop and eventually became proprietor of an establishment employing three hundred workers. Leclair's interest in improving the condition of his workers and in making them more industrious led him to frequent the various socialist schools, especially the Saint-Simonian and the Fourierist, but he found their ideas insufficiently practical and immediate for his purposes. In 1842 he introduced the profit sharing system in his shop. Difficulties were made for him by workers unfriendly to the idea, but he won over his forty-four best workers by dividing among them about 12,000 gold francs as their share of the year's profits. Later his plan was impeded by the police regulation that "the workman must make no covenant with the master." He revised his system several times: sharing, first reserved to the best workers (called by him *noyau*, core), was later extended to all; the best workers always received a higher wage, however, and consequently a greater share in the profits. Leclair's system, regarded as a model by such economists as Charles Robert and Karl Viktor Böhmert, was outlined by him in a pamphlet, *De la misère et des moyens à employer pour les faire cesser* (Paris 1850). In order further to improve the working conditions of his employees Leclair with the aid of chemists experimented successfully in the manufacture of zinc white to replace the poisonous white lead which was now barred by statute in various countries.

Leclair was defeated for the legislature in 1848. In 1865 he settled near Paris in the village of Herblay, where he became mayor and was active in promoting institutions for popular education. The Société pour l'Étude Pratique de la Participation du Personnel aux Bénéfices in Paris, which had been founded by Charles Robert in 1879, looks to Leclair as the initiator of its policy.

GEORGES WEILL

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LEDRU-ROLLIN, ALEXANDRE-AUGUSTE (1807-74), French statesman. After having achieved success at the bar Ledru-Rollin began his career as a liberal statesman in 1834 by

publishing a pamphlet in defense of the republican insurrection known as the Transnonain Affair. From 1841 to 1848 he was the sole parliamentary representative of those extreme radicals who refused any recognition to the July Monarchy. To support his cause he founded the newspaper *Reforme* (1843-50). He played a prominent part in the overthrow of Louis Philippe in February, 1848, and was included in the Provisional Government which resulted. As minister of the interior he made his one lasting contribution, which was also the one lasting contribution of the Second Republic—the organization of universal manhood suffrage. While in office Ledru-Rollin manifested unexpected conservatism in helping to suppress several uprisings, but when a less liberal group came into power after the June Days he became the recognized leader of the radical forces. This position he retained from June, 1848, until June, 1849, making no contribution to legislation but leading the opposition in every important debate. His entire interest was directed toward political rather than social reforms. At first therefore the socialists held aloof and refused to support his candidacy for the presidency, but later they combined with the radicals under his leadership. His downfall came as a result of his opposition to Louis Napoleon's Roman policy. Forced into exile he lived from 1849 to 1870 chiefly in England, where he joined Mazzini and Kossuth in a triumvirate with the ambitious but futile program of establishing republicanism throughout all of Europe. Although at first he was the recognized leader of republican intrigue against the Second Empire he gradually sank into comparative insignificance. He returned to France in 1870 but played only a minor role. Throughout his career Ledru-Rollin, who belongs in the front rank of nineteenth century French orators, was dominated by the ideas of the Mountain of 1793. He was one of the chief agents who carried the principles of the First Republic through the Second to the Third. Today he is remembered in France primarily as the "father of universal suffrage."

ALVIN R. CALMAN

Works: Ledru-Rollin's chief writings have been collected as *Discours politiques et écrits divers*, 2 vols. (Paris 1879).

Consult: Hartmann, G., in *La cité*, vol. iv (1908-09); Calman, Alvin R., *Ledru-Rollin and the Second French Republic*, Columbia University, Studies in History, Economics and Public Law, no. 234 (New York 1922), and *Ledru-Rollin après 1848* (Paris 1921); Weill, Georges, *Histoire du parti républicain en France (1814 à 1870)* (new ed. Paris 1928).

LEEUWEN, SIMON VAN (1626-82), Dutch jurist. Van Leeuwen was a prolific writer on the laws and antiquities of his native province of Holland. Shortly after graduating at Leyden he published a book entitled *Paratitula juris novissimi*, further described as a summary of "Roman-Dutch Law" (*Rooms-hollands regt*). This phrase, which he thus coined, he later adopted as the title of a much enlarged work on the law of the province of Holland, published at Leyden in 1664. In arrangement it follows the *Inleiding tot de hollandsche rechts-geleertheit* of Grotius and includes also a book dealing with procedure. Two years earlier van Leeuwen had published a Latin treatise bearing the title *Censura forensis theoretico-practica*, a work addressed, as its name implies, to both students and practising lawyers. This is of wider scope than the *Rooms-hollands regt*. It deals more fully with the Roman law and devotes attention also to the laws and customs of neighboring provinces and states. The *Censura forensis* has been judicially described as "a book of high authority" (in Denysen v. Mostert, Law Reports 4 Privy Council, p. 255). In the constitution of the South African Republic (Transvaal) and of the Orange Free State—now members of the Union of South Africa—the *Rooms-hollands regt* had attained almost the authority of a statute. It is accessible to English readers in the translation of Sir John Kotzé. Van Leeuwen practised law in Leyden and quite at the end of his life was appointed assistant registrar of the High Court of Holland in The Hague. His supposed greater intimacy with the practise of the courts has been alleged as a reason for preferring him to John Voet, the author of the famous *Commentarius ad pandectas* (2 vols., The Hague 1698-1704). But in fact van Leeuwen is not conspicuous for a grasp of actualities. He not infrequently contradicts himself and in the courts of South Africa and Ceylon has not enjoyed a favor commensurate with that extended to Voet.

R. W. LEE

Works: *Paratitula juris novissimi* (Leyden 1652, 2nd ed. 1656); *Roomsch-hollandsch recht* (Leyden 1664; ed. by C. W. Becker, Amsterdam 1780), tr. by J. G. Kotzé as *Simon van Leeuwen's Commentaries on Roman-Dutch Law*, 2 vols. (2nd ed. London 1921-23); *Censura forensis theoretico-practica* (Leyden 1662; 4th ed. by G. de Haas, 2 vols., Leyden 1741); *Corpus juris civilis* . . . (Amsterdam 1663); *Batavia illustrata*, 2 vols. (The Hague 1685).

Consult: Fruin, Robert, "Over Simon van Leeuwen en zijn bedenkingen over de stadt-houderlijke magt" in his *Verspreide geschriften*, vol. viii (The Hague 1903)

p. 95-113; Paquet, Jean Noel, *Mémoires pour servir à l'histoire littéraire des dix-sept provinces des Pays-Bas*, 18 vols. (Louvain 1764) vol. iv, p. 391-400; Weesels, J. W., *History of the Roman-Dutch Law* (Grahams-town, Cape Colony 1908) p. 306-15.

LEFROY, AUGUSTUS HENRY FRAZER (1852-1919), Canadian jurist. Lefroy taught law at the University of Toronto from 1900 to 1919. He sought to instil a spirit of scholarship into legal study in Canada and as editor of the *Canadian Law Times* from 1915 to 1919 secured articles by the outstanding legal writers abroad. His reputation rests on his pioneer systematization of the law in the field of the distribution of legislative power in the Canadian federation and on his attempt to ascertain the trends of the law, which he regarded as highly flexible. With due regard to their authoritativeness he studied the decisions and dicta in the leading cases before the Canadian and imperial tribunals, the arguments of counsel, the reports of ministers of justice, American and Australian decisions and the discussions of other writers and worked out and illuminated broad principles of constitutional interpretation. But fundamental to all of them was his discovery as a legal philosopher of the rationale of the Canadian constitution in its combination of federalism with what he considered the freedom it provided for its own development in accordance with the growth of a young nation. Hence for its construction he regarded as of slight applicability American federal jurisprudence with its rigidity and its narrowing of the sphere of legislative power by express or implied reservations to the individual, by executive and judicial checks and by principles supposedly inherent in a federal system. The Canadian constitution, he held, must be interpreted as an act of the British Parliament; but as an act granting powers of government it must be interpreted liberally and the powers of the federal and provincial legislatures must each be considered plenary within its scope. Thus he really emphasized the powers of the provinces; he considered the disuse of the dominion power of disallowing provincial legislation merely in order to prevent allegedly unjust interferences with vested rights to be "a perfectly sound and natural development of constitutional theory," and he sought to extend the fiscal powers of the provinces into the field of indirect taxation. Other Canadian scholars have built upon Lefroy's work. Moreover, as he demonstrated that the dominion constitution was of both theoretical and practical interest for comparative jurisprudence, he was constantly

consulted by experts on federal questions in other parts of the British Empire and in the United States.

W. P. M. KENNEDY

Important works: *The Law of Legislative Power in Canada* (Toronto 1898); *Canada's Federal System* (Toronto 1913); *Leading Cases in Canadian Constitutional Law* (Toronto 1914); *The British versus the American System of National Government* (Toronto 1891); *A Short Treatise on Canadian Constitutional Law*, with a historical introduction by W. P. M. Kennedy (Toronto 1918).

Consult: Kennedy, W. P. M., in *Canadian Law Times*, vol. xxxix (1919) 197-200.

LEFT WING MOVEMENTS, LABOR. *See* RADICALISM; SOCIALISM; TRADE UNIONS.

LEGAL AID. The ideal of modern law is fairness to rich and poor alike. But the latter are often at practical disadvantage and need special administrative help. In its broadest colloquial sense the term legal aid includes all such help. So far, however, as legal aid is spasmodic, casual, purely individual or administered as a minor incident to other forms of cooperation or relief it falls beyond the scope of this article. The treatment here deals with considered and organized efforts, both governmental and private, primarily intended to give the poor full benefit of laws existing either for their particular protection or for protection of the populace in general.

Problems of legal poor relief are old, pervasive and persistent. At scarcely any time or place in the development of civilized society has it been possible for indigent persons unaided to maintain their rights. Special provision for them in litigation appeared on the Twelve Tables of the Roman Republic. English law for not less than eight hundred years has at least purported to give poverty stricken litigants peculiar and necessary privileges. A Scottish law of 1424 dealt with the plight of "ony pur creatur that for defalt of cunnyng or dispense can nocht or may nocht folow his cause." In Spain during the time of Ferdinand and Isabella poor prisoners were systematically supplied with advocates at the public expense. The *Book of the General Lawes and Libertyes concerning the Inhabitants of Massachusetts*, published in 1648, contains the brief suggestion of a plan patterned after the current English practise. In modern times the need for legal aid increases enormously as industrialism and urban conditions replace simpler ways of living. Litigious collisions multiply and legal

technicalities persist. Particularly in the United States immigration, introducing millions of imppecunious persons unaccustomed to and often entirely unfamiliar with existing law and usages, has made this need intense and very difficult to supply. New York and Chicago, great cities largely built up by immigrants, produced the earliest American legal aid societies. During the present century attention has been directed to legal aid as never before, and despite the disrupting influence of the World War the movement has gained ground the world over.

The difficulties with which legal aid is designed to grapple are sufficiently obvious. A poor litigant may be helpless to initiate or defend a suit because he has no money to satisfy court fees or taxes on legal process; because he cannot give security for costs or appearance; because he cannot pay for collecting evidence or summoning witnesses; or, most common of all, because he cannot afford a lawyer. Indeed such a person without contemplating litigation may from lack of sound professional advice never discover what are his legal rights, may fail in an effort to make a simple conveyance or draw a simple contract, be cheated by a more knowing man or even with no evil intent run afoul of the criminal law. A well rounded legal aid organization does much more work outside the courts than in them. Its great effort is to keep its clients clear of trouble or to settle their difficulties by conciliatory proceedings.

Historically, however, the legal aid movement was first related to litigation. Practical abolition of unjust litigation involving the poor is to some extent possible. For instance, the Massachusetts law providing an easily enforced criminal penalty for refusal to pay wages has reduced actions on liquidated wage claims to the vanishing point. But solutions so nearly ideal are rarely achieved. The most thoroughgoing relief tends rather to lie in procedure so simple and free from expense that poverty will be no bar and technical assistance superfluous. In England this sort of remedy can be traced down from the ancient bills in Eyre through the original Court of Requests (called at first the Court of Poor Men's Causes) into the later courts of requests and the efficient modern county courts. Small claims courts have been set up in some of the European countries and during the last twenty years in many states of the United States. Workmen's compensation boards furnish another means of special relief. While such relief is started and maintained with a special eye to needy litigants it tends for rea-

sons of practical convenience to include all cases of certain types or within certain money limits. This theoretical democracy of remedy, up as well as down, frees such tribunals from the delay inevitable if each claimant must establish poverty as a condition precedent to a hearing on the merits. Thus they are more easily accessible to the poor, for whom they are intended, than ordinary courts can be under *in forma pauperis* procedure. Moreover in them suitors benefit from judges or commissioners with the skilled insight of specialized experience. Unfortunately, however, it has not been and probably never will be possible to handle in this manner all the business of indigent litigants. Indeed even a small claim may require lawyer's help for proper presentation, and such vitally important matters as workmen's injuries often demand expert witnesses as well. So for a complete scheme of legal aid these particularized tribunals must be supplemented by relief in courts of general jurisdiction and by assistance from other sources.

Poor men's access to the ordinary courts has offered a problem somewhat differently handled, by different nations. In general the common law countries have avoided elaborate legislation on the topic. Some of the states of the United States indeed entirely lack such legislation. Many countries of Europe and of South and Central America, on the other hand, have legislated in detail. In Germany and still more in the United States organized private activity has been very important, while many other nations rely chiefly upon official or semi-official agencies in supplying the necessary legal aid in cases before the ordinary courts. Diversity of approach, however, does not indicate diversity of problem. Exactly the same administrative and judicial perplexities have been encountered wherever legal aid has attained anything like mature growth.

Of these the first is a double problem of selection. Persons with means masquerading as poor men must be prevented from stealing undeserved relief, and individuals with baseless claims or defenses should not, in Francis Bacon's apt phrase, "become rather able to vex than unable to sue." Fatal crowding of the courts for lack of proper selection wrecked certain early relief plans, and every modern legal aid system in some fashion tests applicants' needs. Quick testing is essential, for to those with small means justice delayed is emphatically justice denied. It has proved wisest neither to risk belated action nor to impede ordinary judicial functions by loading this preliminary task directly on the judges. So under the

sounder selective schemes outside help is enlisted. The determining body may be a lawyer's committee, as in England; a commission connected with the court, as in Italy; or what amounts to a separate tribunal *ad hoc*, as in France. In the United States from lack of proper official arrangements the effective determinations are made for many purposes by voluntary legal aid organizations. Need of celerity has sometimes led to rigid standards of poverty little above the line of destitution, as under the old English practise. In present day England certain property and income limits are set for ordinary circumstances and more liberal limits for special circumstances. Continental countries more flexibly define "poverty," a usage theoretically sounder and apparently not impracticable. In Austria and Scotland it is the practise to require as evidence of applicants' means certificates from local governmental or church authorities. Occasional necessity of special investigation is usually recognized.

Decisions in civil cases as to whether or not financially deserving applicants have reasonable grounds for litigation are made contemporaneously with or as quickly as possible after determinations of poverty and normally by the same officials or committees. Where litigious legal aid extends to criminal matters, it is not customary to require from accused men preliminary showings that they have meritorious defenses. The public duty of protection from unfair treatment obviates this feature of the process. But it should be remarked that in New York City under the guidance of intelligent, honest lawyers from the Voluntary Defenders Committee most poor criminal defendants admit their guilt by formal plea. It still remains for counsel to ascertain that judges are adequately advised of considerations relevant to fixing penalties. This legitimate settlement of criminal cases has its analogue on the civil side. Investigation of the merits of a client's claim usually involves consultation with the opposing party, and these consultations are employed for conciliatory ends. European and South American laws (e.g. in Argentina, Brazil, Italy, Monaco and Sweden) explicitly require that conciliation be attempted. Disinterested mediation is a valuable substitute for or supplement to official conciliation tribunals. How much work is saved the ordinary courts may be judged by the fact that the Legal Aid Society of New York has obtained pacific settlement in something like nine or ten times as many cases as it has litigated. And it may be added that one

of the chief aims of organized legal aid in the United States is the establishment of effective conciliation courts or boards.

The ordinary consequences of a grant of legal aid are, first, remittance of some expenses and assistance with respect to others and, second, furnishing of professional advice and assistance either gratuitously or at nominal cost. The expenses involved in a civil suit, aside from lawyers' compensation, take three distinct forms. First come court fees: charges for entering or docketing a case, for service of process, for filing subsequent papers, and other related demands, often including taxes on judicial proceedings. Second are costs; that is, sums payable to an opponent who wins an interlocutory or final victory. Potential liability for costs often manifests itself by a requirement that security be given. Third are miscellaneous expenses such as those involved in searching for and summoning witnesses, taking depositions and obtaining copies of public records for evidential purposes. The appropriate authorities, legislative or administrative, may provide effectively for remission of taxes, term fees, entry fees and the like. Nothing more than the simplest ministerial action is required, and only extremely bad administration will in this respect impose peculiar handicaps on a poor suitor forced to proceed gratuitously. Likewise provisions for remission of costs or security are common and perfectly workable. In criminal proceedings these matters still less often cause trouble, because those accused are not usually called on for such expenditures, at least in advance. But in civil and criminal cases alike serious difficulty arises where legislation or court order directs officials dependent upon fees to perform for poor people uncompensated services involving discretion and energy. It is only natural for a sheriff or constable to shirk serving a writ or witness summons, making an attachment or levying an execution at the unremunerative behest of a needy person. Nor is it often practicable for the individual granted legal aid to overcome the officer's reluctance through governmental pressure. Neither of course can mere remission of court charges save the poor litigant from miscellaneous expenses contained in the third category above.

As a result a number of countries—e.g. Austria, Czechoslovakia, Hungary and Sweden—have arranged that fees to officers and witnesses, costs of notifications and other necessary expenditures shall be provisionally defrayed by the treasury, in contrast to the English practise

of requiring in certain cases advance deposits by poor persons. Belgium has an alternative arrangement: to leave fees and charges outstanding in the first instance, compelling payment by the opposing party if the poor person is successful. Where the treasury makes advances, these are collected in appropriate circumstances from the opposing party or under some laws from the beneficiary himself if the financial conditions requisite to legal aid cease to exist. American experience indicates that even generous expedients of this type cannot in very small cases assure uniformly assiduous service by court attachés. But they are far better in every practical way than mere general commands to perform official duties without recompense.

Much more serious hindrances have been encountered in the effort to furnish deserving poor litigants with proper professional assistance. Of all the factors in a legal aid scheme this is probably the most important. Given a supply of capable lawyers, marked success can be obtained without other contributing assistance. To illustrate with a case from the United States: Massachusetts now has no surviving statutory provisions or common law practise with regard to legal aid in her ordinary civil courts. But the city of Boston contains one of the best American legal aid societies, and the poor of that metropolis have their legal rights relatively well safeguarded.

Generally speaking, three administrative plans have been tried. The first involves reliance upon volunteers or unpaid lawyers assigned to cases by court order or some other method; the second, reliance upon governmentally compensated lawyers, either assigned to or chosen by poor litigants; the third, reliance upon professionalized legal aid lawyers. In a specific community aspects of all three plans are now likely to appear simultaneously. This facilitates comparison and has led to definite conclusions about relative merits. The volunteer or unpaid assignment plan is a failure. Adverse critics of the legal profession point to the great charitable service given by medical men and condemn the lawyers as mercenary. But the comparison is unfair. Diseases are common in type, if not in distribution, to all financial strata of mankind. A physician, whether general practitioner or specialist, is as capable of treating the poor as the rich. The rich man's litigation, on the contrary, is entirely different from that of the poor. A counselor well qualified to conduct a great will contest or to advise a powerful corporation might botch a workman's com-

pensation case or a small wage collection. He has in a sense lost the common touch. So any scheme based upon casual gratuitous legal assistance to the poor meets the horns of a dilemma. Either unqualified lawyers will be pressed into service or the whole weight of this charity will be cast on the shoulders of practitioners whose low earning power least enables them to bear it. It is true that in small communities, where all lawyers have miscellaneous practises, fairly effective charitable rotation may be worked out. Legal aid, however, is a mass metropolitan task and must succeed in great centers of population. The same consideration serves to answer the suggestion that kindly individual lawyers in large cities couple competency with willingness to work for the poor. Individual effort cannot promise continuity, scope or thoroughness to meet the serious and growing need.

A scheme for assigning compensated lawyers chosen fairly broadly from the ranks of the profession does not escape the more serious criticisms outlined above. Compensation cannot be liberal without imposing an undue drain upon either the public treasury or, if fees be made contingent and payable from the fruits of success, upon recoveries by indigent suitors. The cost in lawyers' time of handling a ten-dollar case may be the same as in handling a thousand-dollar case. Thus the expenses of thriftily managed legal aid organizations in the United States during 1930 equaled 62 percent of the sums collected for clients. Under an assignment scheme then there is difficulty in obtaining by any practicable payments service both expert and vigorous, and distinct risk—particularly in criminal matters—that the assignments will drift into the hands of practitioners whose moral character is not high.

Such difficulties have become apparent in the actual operations of volunteer or assignment systems on the continent and in England and the United States. A common sequel of dissatisfaction with these systems has been stimulation of private legal aid organizations. Germany early developed private as well as municipal legal aid bureaus. In the United States especially during the last fifty years and partly under the impulse of German experience there has grown up, to fill gaps in a carelessly conceived and wretchedly articulated set of official schemes, an admirable, widespread and strongly cooperative body of voluntary associations supported by contributions from the bar and the general public. The earliest legal aid society was organized in New

York City in 1876. The great bulk of American legal aid lawyers are now salaried specialists devoting their time exclusively to this kind of practise. They have developed very effective operating techniques. In 1930 their money collections for clients aggregated \$876,447. Since much service unconnected with money recoveries is constantly given, statistics relating to numbers of cases are more illuminating. Beginning with 1 city and 212 cases in 1876 the work had expanded in 1900 to 3 cities with 20,896 cases, in 1909 to 6 cities with 48,212 cases and in 1916 to 35 cities with 117,201 cases. The World War caused curtailment. In 1919 there were 23 cities with 109,048 cases. In 1930 some 65 cities produced a grand total of nearly 218,000 new cases. Successful operations by these societies have caused sounder extension of governmental agencies. Public defenders now exist in a number of states, and some municipal legal aid bureaus are doing helpful work. A number of European and South American countries, either spontaneously or following the lead of Germany and the United States, are maintaining and expanding private legal aid institutions.

Private activity has had another important general effect. Initially attention in England was fixed upon the need of helping indigent folk wage lawsuits successfully. The idea of giving them legal advice entirely apart from litigation or with a view to avoiding litigation gained little notice. A pugnacious philosophy of legal aid grew up which has cramped fully rounded development to the present time. In the United States legislation was even more constricted, but a broader philosophy prevailed from the foundation of the first legal aid society. Advice was given, wills and contracts drawn, settlement of disputes assisted. While perhaps in no other country has the official system been so narrow as in England and the United States, there has been discernible, at least in earlier governmental plans, an inclination to focus upon litigation. Now, however, this is changing. More and more the public schemes are furnishing adequate consultation and drafting facilities. The most recently and perhaps the most intelligently worked out of the European plans, that adopted by Sweden since the war, provides an interesting comparison with the preponderantly private American plan. Publicly supported Swedish institutions offer not only lawyers for court work but mediation, explanations, advice, draftsmanship and assistance in the various branches of notarial business. Also with respect to litigation

a healthy competitive device was created by carrying over (from an earlier inadequate assignment system) provisions permitting appointment for poor litigants of legal representatives not connected with the public legal aid bureaus. A litigant himself is allowed within reasonable limits to choose his representative, who receives suitable remuneration from the public treasury. This competition has elevated the standards of regular legal aid lawyers and lessened popular hesitancy to accept their services.

No less important than sound procedure is articulation of the legal aid movement both internally and with other social services. Nation wide organization is perhaps most vividly exemplified by developments in the United States after 1917, when for the first time definite support was obtained from the bar of the country as a whole. Since that date many state bar associations have formed legal aid committees and the American Bar Association has brought into operation its standing committee on legal aid work. Even before the war the various American societies, following the example set by similar German organizations, had held conventions and entered a loose national alliance. This alliance suffered from inherent weaknesses and became moribund about 1916. In 1923 the present vigorous National Association of Legal Aid Organizations replaced it. Through this later unifying body the societies and bureaus have been coordinated. Reference of cases from one locality to another is now facilitated, and the general progress of the work has come under wiser control.

Legal aid has also come to be at least partially organized on an international basis. In 1905 the Hague Convention on Civil Procedure outlined reciprocal possibilities, which have since been followed up by numerous treaties. In 1924 the League of Nations conducted a conference at which the following nations were represented: France, England, Norway, Italy, Poland, Spain, the United States and Japan. Communications were received from the Austrian government and from the German Bar Association (*Deutscher Anwaltverein*). One consequence of this meeting was the League's publication of a volume containing collected laws and a list of legal aid organizations the world over. The peculiar difficulty of obtaining justice for poor persons in countries other than their own is being distinctly lessened.

There has always been some connection between legal aid and general social service. Some laws, as, for example, those of Argentina, direct

defenders of the poor to visit prisons, penitentiaries, hospitals and reformatories, receiving complaints and making reports and suggestions. Much poor relief in legal matters has been launched and indeed is still regularly conducted by charities also working in different fields. But the lawyers' characteristic aloofness is not easy to break down and, while considerable progress has been made toward linking legal aid effectively with other relief agencies, it is certain in the United States and probable in many other countries that much greater advances are yet to be accomplished.

The significance of the wide legal aid development in modern civilization is very great. It has progressively bettered the condition of the poor, increased their understanding of law and willingness to conduct themselves lawfully and corrected unwise revolutionary inclinations. Fair minded legal aid lawyers have again and again changed for the better the attitude of employers to employees. Efficient legal aid unquestionably increases the public prestige of bar and bench alike. The movement gives considerable opportunity for training young lawyers, sometimes even during the course of their studies. It will combat more and more effectively such abuses as extortionate contingent fee arrangements. Finally, one of its most important possibilities, already amply manifested in the United States, is furtherance of wise law reform by recommendations based upon exceedingly broad observation of the practical results of existing substantive

and procedural rules. Legal aid may well be one of the decisive factors in successful social adjustment.

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See: JUSTICE, ADMINISTRATION OF; PROCEDURE, LEGAL; LEGAL PROFESSION AND LEGAL EDUCATION; SMALL CLAIMS COURT; PUBLIC DEFENDER; WORKMEN'S COMPENSATION.

Consult: Parry, E. A., *The Law and the Poor* (London 1914); Smith, R. H., *Justice and the Poor*, Carnegie Foundation for the Advancement of Teaching, Bulletin, no. 13 (New York 1919); Reports of the Committee on Legal Aid Work appearing annually since 1922 in American Bar Association, *Report of the Annual Meeting*; National Association of Legal Aid Organizations, *Record of Proceedings at the Annual Meeting*, published annually since 1923; Maguire, J. M., "Poverty and Civil Litigation" in *Harvard Law Review*, vol. xxxvi (1922-23) 361-404; Smith, R. H., and Bradway, J. S., *Growth of Legal Aid Work in the United States*, United States, Bureau of Labor Statistics, Bulletin, no. 398 (1926); Gurney-Champion, F. C. G., *Justice and the Poor in England* (London 1926); American Academy of Political and Social Science, *Annals*, vol. cxxiv (Philadelphia 1926); League of Nations, *Legal Aid for the Poor*, 1927. V. 27 (Geneva 1927); Joint Committee for the Study of Legal Aid, New York, *Report* (New York 1928); Maguire, J. M., *The Lance of Justice, a Semi-centennial History of the Legal Aid Society 1876-1926* (Cambridge, Mass. 1928).

LEGAL EDUCATION. *See* LEGAL PROFESSION AND LEGAL EDUCATION.

LEGAL PROCEDURE. *See* PROCEDURE, LEGAL.

LEGAL PROFESSION AND LEGAL EDUCATION

ANCIENT AND MEDIAEVAL.....H. D. HAZELTINE

MODERN LEGAL EDUCATION.....MAX RADIN

MODERN LEGAL PROFESSION.....A. A. BERLE, JR.

ANCIENT AND MEDIAEVAL. The legal profession has been intimately connected in all societies with the rise and development of legal systems. It has been pretty well established that the development of a system of law "has never taken place except through the formation of a professional class—whether that professional class be religious or secular, official or unofficial" (Wigmore). In primitive groups the personal dispensation of justice by a chief seems never to have produced a true system of law. Only with the appearance of a professional class has there been a transition from primitive personal justice to conditions in which a genuine legal system originates and develops. In Semitic history this transition is illustrated by the institu-

tion of judges in Israel; and the history of Rome offers an even more striking example of the development of a legal system through the work of lawyers.

As the creator of legal systems the professional class has not always been composed of lawyers in the sense of advocates. In theocratic societies the priests acted in this capacity; in Egypt and Mesopotamia the judges and the official clerks; in Greece the advocates and jurors; in Rome the judges, advocates and jurists; in mediaeval France and England the attorneys, advocates and judges. Where the legal profession develops as part of a religious hierarchy, as it has in Egyptian, Mesopotamian, Hebrew, Moslem and early Roman history, law, theology and morals

are intermingled and the corresponding offices are accordingly undifferentiated. Under such conditions the legal profession is a part of the general theocratic system and possesses a distinct theological and moral cast. In the case of the Roman Catholic church of the Middle Ages, which claimed both temporal and spiritual powers and was in essence a theocracy, the clergy formed in many respects a legal profession. Under many legal systems there are definite evidences of the transition from a theocratic or informal body of lawyers to a secular and professional composition. Thus Hammurabi took the general administration of justice from the hands of the royal priests and placed it in a body of secular judges; in mediaeval England secular judges and lawyers gradually displaced the ecclesiastics in the work of the common law courts.

The formal means by which a professional class has developed the law into a system have varied. Some legal systems have developed largely through enacted law. Others, like the Jewish, Hindu, Roman and English systems, have developed largely as the result of the reasoning of the professional class based on a study and comparison of cases. But the professional class under these "case system" regimes has not always been the same. In the growth of Jewish law the rabbis in their school teachings were the leading factors; in later Roman law the jurists; in Hindu law the muftis, who possessed no priestly or official status; and in the English system the judges, assisted by attorneys and barristers.

The advocate occupies an important but by no means exclusive place in the history of the legal profession. In the oriental systems of law the professional advocate was lacking. In early Athens parties pleaded their own causes and no one was allowed to appear as an advocate unless he himself had some interest in the cause. Later, however, the rule was relaxed, and if a man was prevented by illness or other reason from conducting his own case, a relative or friend was allowed to speak in his behalf. There was nevertheless a class of men who, while they did not themselves appear in the courts, composed speeches for clients to deliver in their own causes. Distinguished men like Antiphon, Isaeus and Isocrates made this their ordinary occupation; and after Antiphon had set the example of accepting fees, they gained their livelihood by it. The advocate was important in the early and republican periods of Roman legal history, but in the Roman imperial era he was largely re-

placed by the jurist, to whom the molding of Roman law must be in large measure attributed. In the secular class of skilled elders—the "law speakers" or "law men"—of the Scandinavian systems there was a curious mingling of the functions of the partisan advocate and the judge. In the early Germanic law and in those mediaeval systems that grew up under marked Germanic influence there was a division of the functions of the lawyer between the *attornatus*, or *Anwalt*, who was the agent of the client to act for him in the winning or losing of the suit, and the *Vorsprecher*, who spoke the formal words for the client in court. This duality persisted, and its importance in the European systems of the later Middle Ages is attested by the history of the attorney and advocate in France and England. A somewhat analogous distinction existed in Roman law between the *cognitor*, who represented his client for all purposes, and the *patronus*, who interpreted the law and marshaled the evidence in his client's behalf.

The history of the Roman legal profession is of central importance because of the influence that Roman law has had on subsequent legal development. Ancient Roman law was based on a fundamental distinction between divine or sacral law (*fas*) and human or civil law (*jus*). Although distinct these bodies of law were both administered by the *collegium* of *pontifices*. The *pontifices* applied the same methods to both; in general their function in each, based upon their expert knowledge, was to assist the parties in their own performance of the required forms and ceremonies. In the realm of *fas* they were a sacerdotal official class, although the later conception of a priestly or spiritual order (*Geistlichkeit*) cannot be applied to them. In the realm of the civil law (*jus*) they assisted the parties in concluding transactions and in bringing or defending legal actions. Their expert and secret knowledge, going back, according to tradition, to King Numa and embodied in the written pontifical "archive," enabled them to play a leading role in legal life in a period when form was of predominant importance. The early Romans drew a sharp distinction between the law (*jus*) and its application (*actio*). *Jus* was customary law, an expression of the folk culture; the *actio* as the external crystallization of the law manifested itself in definite forms. Legal transactions required certain forms (*certa et sollemnia verba*) before they could be effective; when the law was broken, only recognized forms of *actio* could be invoked. The *pontifices* preserved these

forms in their archive. They regarded it as their function to apply the traditional *formulae*, wherever they were available, to the needs of the parties. Where no existing form fitted the needs of the particular case, they shaped a new one and added it to their archive for use in future cases. In this way their work represented the beginning of the Roman legal system.

Although the *responsa* which the *pontifices* gave were not judicial decisions but merely expert opinion on legal questions, they were accepted by the parties and the courts as authoritative because the *pontifices* alone knew the mysteries of the law. In the sphere of sacral law they long retained this monopoly. But in the civil sphere there gradually developed an independent legal system, the *jus civile*, linked in the later republican period to the growth of a legal profession and a legal science distinct from the calling and special knowledge of the *pontifices*. This development reached its culmination in the work of the classical jurists of the imperial era before Diocletian, whose achievement lay in the elaboration and refinement of the materials they received from the creative republican period. The age of codification that followed reached its most complete expression in the Justinianian law books. Thus the development of a secular Roman legal profession and system of legal education spans the centuries from the pontifical jurisprudence to Justinian.

The legal profession of the republican era was not a closed order or rank. In some of the leading families legal learning was preserved from one generation to another; but few Romans devoted themselves exclusively to a legal career. The pursuit of the law was treated as a matter of honor; its reward was the public influence or high office that came to the lawyer. His activity lay principally in formulating legal transactions according to the wording of the *formulae* and in giving *responsa* on legal questions, either before or during legal proceedings, at the request of parties, magistrates or judges. The "consultation" took place either in the house of the lawyer or at the Forum; sometimes the *responsa* were given in writing. Finally there was the work of advocacy. Cicero and Hortensius may be taken as representative of brilliant and successful advocates in Roman times. The genius of the advocate—*vir bonus dicendi peritus*, as Cato called him—consisted not only in forensic oratory but also in the careful preparation of his causes and in his devotion to the interests of his clients. *Jus* and *leges* were a part of Roman elementary education: both as

the oldest Roman book and as a fundamental law the Twelve Tables were taught at school. While the law student read for himself the legal literature and the edicts of the magistrates, his only direct professional instruction was derived from attendance as *auditor* at the consultations held by a lawyer. The giving of *responsa* in public appears to have begun in the early part of the third century B.C.; to these *responsa* the legal education of the time was most closely related. Young men attached themselves to a well known and successful lawyer as his pupils, and thus there arose private law schools of a professional kind. But these schools of the republican era still lacked the organization of those in the days of the empire. Instruction was still chiefly practical in character, and there was no growth of distinctive principles separating one school of thought from another, such as that which marked the rise of the Sabinians and Proculians in later times. In general each lawyer-teacher made his own school; and the method which he followed was that of the disputation, which consisted primarily of a lecture in which the lawyer, giving a *responsum*, solved the problem in hand by one means or another—a form of instruction which can be studied in the writings of Gellius. In the earlier period the disputation served both as advice to the lawyer's clients and as instruction to his pupils. But with the growth of written opinions it assumed more exclusively the character of legal education; in fact cases were sometimes considered which had arisen in the practise of other lawyers.

There was also a more theoretical form of training. There were lawyers who gave instruction in the rudiments of jurisprudence to law students; often the same lawyer gave both practical and theoretical instruction to his pupils. Elementary instruction in theory, which came to be known as *instituere*, grew in importance and ultimately led not only to an emphasis on a theoretical training as an essential preliminary to practise but also to the development of a definite course of legal study. It was only in the era of the empire, however, that these tendencies resulted in the creation of professorships at law schools devoted exclusively to the education of the profession.

In the imperial era down to the end of Diocletian's reign the legal profession continued to hold the high place in public and private life which it had acquired in republican times. The emperors in their legislation regulated with minute care the rights, the privileges and the

duties of advocates. The status of advocate and the career of law teacher were distinguished. Legal education continued to be even more systematically developed than in the later republic, both in an accumulating legal literature and in oral instruction. In addition to the casuistic teaching at consultations and the disputations the more formal survey of the private law—known to the republican era as *instituere*—was further developed. While some of the lectures and disputations were limited to a scholarly audience, some were held publicly, so that anyone could be present and share in the instruction given. The public disputations seem to be identical with the *jus publice respondere*, which Gellius tells us took place at various *stationes* or public *auditoria*. The view is held therefore that some legal teachers were assigned public buildings, as was the case also in the teaching of rhetoric. But unlike certain of the rhetoricians, teachers of law did not receive a salary from public funds until the later empire.

Bremer points out that not only were the great classical jurists professors of law, but a large number of them—often the most eminent, such as Julian, Scaevola, Papinian, Ulpian and Modestinus—were provincials. Although Rome was still the center of the world, the provinces formed the most important part of the empire. The Roman law itself had changed: to the *jus civile proprium romanorum* there had been added the cosmopolitan principles of the *jus gentium*. The fusion of these two elements made a world system of the Roman law; and, as Bremer remarks, “in this process of transformation the jurists and the law teachers from the provinces without doubt took the leading part.” In the earlier imperial period, ending with Diocletian, Rome was not the only center of legal study; for there were also several law schools in the provinces, where legal instruction was given in Latin, notably Beirut, Alexandria, Caesarea and Athens. In addition to these schools there were the schools of rhetoric which included law in their curriculum, and in which most of the provincial lawyers appear to have been trained. During the period from Constantine to Justinian there was a growing tendency to bring the law schools under the patronage and control of the state. In the early fifth century the two law professors at Constantinople were chosen by the Roman Senate and paid a salary by the state; the constitution of 425 forbade the professors at Constantinople to undertake private teaching and provided that only those appointed by the

state could give public instruction in law: all others were allowed to teach only in private houses. The law teachers at Athens, Caesarea and Alexandria were not appointed by the state: these schools were suppressed by Justinian. In the latter part of the period the law teachers at Rome received salaries.

Founded at the end of the second or the beginning of the third century, Beirut became the most renowned of all the law schools of the Eastern Empire before Justinian. The creative period of the school extended from the early fifth century (410–20) to the reform of legal studies by Justinian in 533; in 551 it was destroyed by the great earthquake that ruined the city. Its creative period was the era of the “oecumenical masters,” Cyrillus, Patricius, Domninus, Demosthenes, Eudoxius, Amblichus, Leontius, who in addition to their teaching made valuable contributions to legal literature. In this period Beirut was, in Mommsen’s words, “a sort of Latin isle in the midst of the ocean of oriental Hellenism”; students flocked to it from many parts of Europe, northern Africa and western Asia. Greek replaced Latin for instruction toward the end of the fourth or the beginning of the fifth century. In the first half of the fifth century Beirut received from the emperor a *privilegium*, or charter, constituting it a state school; it thus formed with Rome and Constantinople the only schools officially recognized by Justinian. At Beirut in its earlier centuries as at other public schools of law the professors received only honoraria; the amount depended on arrangements between the professor and the students, but the professors had no legal means of recovery. In the fifth century the law professors at Constantinople and Rome received salaries from the state, and while the sources are silent about Beirut it would seem probable that when it became an official school state salaries were instituted. In the course of its development Beirut became the only creative law school in the world. Founded in the days of the power of the Western Empire as a Latin center of Roman legal study in the east, it gradually adapted itself to its environment of Hellenic culture; and, as imperial power moved from Rome to Constantinople, it labored for the transformation of the ancient and classical Roman law into the Greco-Roman law of the east. The school’s work is enshrined in the Justinianian codification, that mixture of the classical law of Rome and the new law elaborated with so much skill and learning by the great fifth century professors.

In the fifth century at the latest attendance at a law school for a prescribed time and the obtaining of a professorial certificate became conditions of entrance into the profession of advocate; as a consequence legal instruction in the schools of rhetoric entered upon a decline. In the period before Justinian the prescribed period of study was four years. While stress was laid in the first year on the *jus civile*, in the second and third years the student also heard lectures on other parts of the Roman system, such as the Perpetual Edict; and in his studies he appears to have made use of several of the writings of the classical jurists. In general the lectures neglected those parts of the law which had ceased to have practical importance; and no attention was paid to criminal law and procedure. The fourth year was devoted to a private study of Paul's *Responsa*. At Beirut a voluntary fifth year could be devoted to advanced work, mainly concerned with imperial constitutions.

During the earliest period of Beirut the professors appear to have followed the methods of the Roman masters. But at the close of the third and during the fourth century after the publication of the great synthetic treatises of Papinian, Ulpian and Paul the program and method of instruction were changed, and the change was followed by the oecumenical masters of Beirut in the fifth century. The new method was didactic in character, *interpretatio*: it consisted in instructing the student in the doctrine of the classical jurists, but it did not exclude the casuistical aspect of the earlier method, the dogmatic exposition of the text being accompanied by questions put to the students. In the fifth and the early sixth century there was a further change: the professors at Beirut not only taught in Greek but adopted the "scholastic" method similar to that which had long been followed by Greek masters in the schools of rhetoric. This constituted the chief contribution to legal education made by the fifth century law professors of Beirut. The method consisted of an exegesis based on passages or words in the texts of the classical jurists. The professor commented on the text and glossed passages or words with brief explanations; he drew attention to what the jurist had said in other parts of his work; he tried to reconcile the views of the jurist under consideration with those held by other jurists; he mentioned the passages in the three ante-Justinian codes (Gregorian, Hermogenian and Theodosian) which bore on the subject matter; he expressed his own views, which were sometimes those that

he had already given to clients; he set out a case (*casus*) and, relying upon a text, announced his solution; he drew from a text, or he himself formulated, a general rule (*canon*), inviting the students to consider it; he gave precise references to authorities and also advice on reading. Mingled with the exposition were the questions put to students and their answers, a practical exercise known as *praxis*. This scholastic method was to influence the work of the Italian law schools in the Middle Ages and forms a close link between eastern and western jurists. On the completion of their work at the law schools many of the students became practising lawyers; many others entered upon judicial or administrative careers; a limited number became professors of law; some entered ecclesiastical life. Justinian's constitution *Omniem* enumerates several of the careers open to students who had made a study of the Digest: *oratores maximi* [advocates] *et justitiae satellites* [assessors] . . . *et judiciorum optimi tam athletae* [judges] *quam gubernatores* [governors] *in omni loco aequo felices*.

Justinian's epoch making codification of the Roman law was accompanied by a reform of legal studies. With the publication of the Digest in 529 the emperor (in the constitution *Omniem*) modified the curriculum in order to make it comply with the new law. He prescribed the order in which the Institutes and the various books of the Digest were to be studied and commented upon in the three years of lectures. These were to be followed by two years of private study, probably supervised to some extent, in which there was study of the *Codex* and further study of the Digest. The details of administration in the schools were prescribed by the emperor even to the extent of the names or titles which the students of each year were to bear, the festivities that were to accompany a student's entry into his third year of study and the prohibition of demonstrations against professors or newly entering fellow students. Justinian also prescribed the methods of instruction, attempting to simplify them so as to keep the teachers from destroying the harmony of his codification, which he regarded as perfect and definitive. Instruction was accordingly to consist of translation, a résumé of the fragments of the Digest and in addition only certain references. Justinian's instructions were, however, too exacting and absolute; and there is clear evidence that they were not rigorously respected at Beirut and in the other schools of law.

With the fall of the western provinces of the empire and the rise of the Germanic kingdoms European legal education entered upon new phases of development. The reduction of the Germanic codes to writing introduced a practical legal science, but in the Frankish and Lombard periods the state paid no attention to schools; apart from the school at Rome, which continued its work, there were no specialized schools of law. Legal education was in the hands of the practitioners; judges and notaries became teachers of law and preserved the traditions of their profession by instructing their successors. In the Carolingian period law found a place under dialectic at the end of the trivium, but with the break up of the Carolingian empire Charlemagne's educational work was largely undone. Under the Ottos, however, there began new educational movements, which culminated in the celebrated law schools of Italy. Schools of Lombard law arose at Milan, Mantua, Verona and notably Pavia. The school at Pavia emerged gradually out of a system of practical apprenticeship—practitioners were at the same time teachers and the judiciary was recruited from them; it rose to great prominence, and Roman law was added to the Lombard law in the scheme of study and instruction. With the rise of the school of Roman law at Ravenna the old school at Rome entered upon a decline. At the end of the eleventh century Ravenna was flourishing. In the twelfth century as part of the general renaissance of ancient learning Bologna began its brilliant career as a school of Roman law under Irnerius, its founder. Adopting the method of the gloss, or textual interpretation, from Pavia, where it had been used in dealing with the Lombard law, Irnerius applied it to the Justinian law books. There was also a school of canon law at Bologna, founded by the work of Gratian early in the twelfth century and using the gloss method. The brilliant achievements of the great Bolognese teachers, civilians and canonists alike, in the period both of the glossators and of the commentators drew students from all parts of Europe; and returning to their own countries they founded schools of law throughout Europe.

Although the Italian schools were dominant in the movement, the revival of legal studies spread to other countries. The mediaeval universities of Montpellier, Toulouse, Orléans and Paris became prominent for their legal education in both the Roman and canon law; but in France as in Spain, England and other countries the

native laws and customs were not studied at the universities until much later. There was legal instruction at the University of Salamanca, founded early in the thirteenth century; in 1348 the first university in the Holy Roman Empire was founded at Prague; before the close of the fourteenth century universities were established at Vienna, Heidelberg, Cologne and Erfurt; in the fifteenth century ten more German universities were established. In these German universities only canon law was taught at first; generally Roman law was not introduced as a subject of study until the second half of the fifteenth century. At Paris in fact a ban on the teaching of Roman law, placed in 1219 by Honorius III, was confirmed in 1312 by Philip the Fair and was not lifted until 1679. The introduction of the Roman law in curricula throughout the continent facilitated its reception and the growth of a learned legal profession. In England before the close of the twelfth century there was a law school at Oxford and possibly at Cambridge. From the thirteenth century, when both schools were flourishing, down to the reign of Henry VIII Roman and canon law were studied and degrees conferred, but Henry VIII abolished the faculty of canon law and founded a chair in civil law at each university.

The purely exegetical method of the glossators, applied in both teaching and writing, was pushed to the extreme. The glosses of one jurist were themselves glossed by another. The post-glossators in their reaction against the gloss adopted a method of scholasticism and developed a fine spun logic alien to the spirit of the mediaeval renaissance. In France the glossators were eclipsed in the second half of the thirteenth century by the school of Jacques de Révigny, professor at Toulouse, who adopted the scholastic method and whose disciples began to apply to the law the dialectics which Thomas Aquinas had used in theology: they sought for general principles and by reasoning deduced all the corollaries. The scholastic method of the post-glossators long dominated legal teaching and legal literature in Europe, even after the rise of the legal humanists in the fifteenth and sixteenth centuries.

The legal profession in mediaeval Europe was molded by broad historical forces. In some regions where Roman culture had been most firmly intrenched there was a continuity of the Roman legal tradition and a consequent revivification of features of the Roman legal professional system. The role of the Catholic clergy in

the professional life of the Middle Ages must also be taken into account. The church developed a legal profession of its own; in addition there were the lay *defensores ecclesiae*, known in the African church as early as the beginning of the fifth century and also in Italy; in Frankish Gaul in the sixth century they were called *advocati* and assisted the bishops and abbots in legal processes. There was finally the influence of Germanic institutions, as shown in the sharp distinction between the attorney and the advocate, so marked in some mediaeval professional systems. In Germany the university law schools were founded later than many of the great schools of Italy and France and could base their methods and studies on the experience of those schools. The early German schools were primarily ecclesiastical institutions: the professors were mostly clerks in holy orders, training men for the spiritual and administrative work of the church. Canon law was therefore the principal subject studied; only gradually because of the growth of humanism and the increasing adoption of rules of Roman law by the courts did Roman law acquire in the second half of the fifteenth century a position of equality with canon law. The native law, being a *jus incertum* and ill adapted to the exegetical method of the teachers, fell outside the scope of the curriculum. The German schools trained a learned and secular legal profession, which gradually displaced the clergy in the councils and activities of the state. This rise of the legal profession to a position of power is one of the main features of the history of church and state in Germany in the period before the Reformation. In France and England the growth of a secular legal profession meant not only the replacement of the clergy by lawyers in the service of the state but also the firmer consolidation of monarchical power in opposition to the power of the church. The lawyers played a most influential role in the vast process which led to the decline of the Roman Catholic church as a world wide state.

The French legal profession of the Middle Ages was composed of advocates (*avocats*) and attorneys (*procureurs*). Like the modern French attorneys (*avoués*) the *procureurs* represented the parties before the courts, whereas the *avocats* merely assisted the attorneys. The rise of the attorneys was slow. Under the early system of procedure, which was oral and formal, private individuals were obliged to appear as parties in their own name and person. In the Frankish

king's special authority, while in the feudal age *lettres de grace* were necessary. In the procedure of the church courts the prohibition upon the use of representatives did not obtain. Although the prohibition as to French courts was not finally abolished by ordinance until 1528 it had ceased centuries earlier to have any force in practise. With the growth of complexity in procedure, accompanied by the gradual adoption of documentation in place of oral proceedings, appearance before courts became a difficult art which required learning. From the middle of the thirteenth century employment of attorneys was more frequent; and representation, ceasing to be a privilege, became a right. Corporations of men who accepted mandates *ad litem* were formed; and in the fourteenth century the profession of attorney (*procureur*) was regulated by ordinance. The profession was limited in respect of number; an oath was required and a tariff of fees was prescribed. An attorneyship became an office, which was originally purchasable; and the assistance of attorneys, except in the inferior courts, was made compulsory. At least in the courts of lower instance the attorneys could act as advocates and even as judges; but attorneys did not enjoy the social consideration possessed by advocates (*avocats*). In the middle of the fifteenth century business agents (*solliciteurs*) frequently directed suits for parties, paying both the *procureurs* and the *avocats*. In the revolutionary period the title of *avoué* was substituted for that of *procureur*; and although for a time *avoués* were replaced by agents provided with a certificate of citizenship, they were reestablished by a law of 1800.

The corporations of advocates of the Lower Empire disappeared with the Germanic invasions and were replaced after the ninth century by the "fore speakers," or *prolocutores*; but about the end of the twelfth century they again arose as auxiliaries of justice in the church courts and later in the French *parlements*. These corporations of *avocats* enjoyed the monopoly of pleading before the *parlements*. Beginning in the thirteenth century the ordaining power and the *parlement* developed a special set of regulations for *avocats*, prescribing the conditions of their licensing and the limits of their charges. *Avocats* were not restricted to pleading but could give advice and prepare legal papers; they were classified as pleaders, consulting barristers and novices or licentiates. Disciplinary power over *avocats* was at first vested exclusively in the ordaining authority and the *parlement*: but with

the rise of *avocats* as an order at the end of the fifteenth and in the sixteenth century disciplinary power was at least partially transferred to the council of the Order of Advocates. The custom, based on Roman and feudal origins, of the "assignment of counsel"—the designation of advocates by the court because the suitor did not know an advocate or for other reasons—ceased completely in the sixteenth century because of the large number of advocates available. Their honoraria could be recovered by judicial process; and the ordinance of 1274, which prescribed a maximum honorarium of thirty livres, was not in fact enforced. In the revolutionary period the Order of Advocates was abolished (1790). Each litigant was left to plead his own cause or to choose someone to represent him or to have recourse to an "official defender" (1791). In the year XII the roll of *avocats* reappeared; and in 1810 the Order of Advocates was reestablished with a monopoly of pleading.

In mediaeval France the university law schools gave the profession its training in legal principles. That training was in the Roman and canon laws, not in the native laws and customs of France. The methods of instruction chiefly applied, in the order of their historical appearance, were the exegetical method of the glossators, the scholasticism and dialectics of the postglossators and the humanism of the Renaissance jurists. But while humanism exercised an influence on legal education in the fifteenth century, it was not until the sixteenth that this movement, represented by the school at Bourges and by the jurist Cujas, largely supplanted the earlier methods of teaching and study.

In England in the thirteenth century a secular legal profession was being formed. In the previous century there had grown up an ecclesiastical "bar"—legists and decretists, who had been trained at university law schools, found ample employment in the maze of ecclesiastical litigation. In the bishops' courts a distinction was recognized between the procurator (or proctor), who represented the client and took care of his case, and the advocate, who pleaded on the client's behalf. The secular profession developed along the same division between the attorney and the pleader (*narrator*, *counteur*). While at first a royal writ was needed to appoint an attorney in court, under Henry III this was required only for a general attorney and under Elizabeth not at all. Even as late as Henry III the attorneys were not professional; but partly because of the control

which the court exercised over them some degree of professionalization took place under Edward I; attorneys could be sued for fraud and negligence. By the time of Edward II the rule was established that no attorney should follow the pleader's profession. In the late thirteenth and the early fourteenth century there were the beginnings of professional staffs of attorneys attached to the three common law courts; and thus there set in the historical process by which attorneys became "officers of the court" which appointed them. This process definitely separated the function of the attorney from that of the pleader.

In the twelfth and thirteenth centuries, when a large number of men made a profession of civil and canon law, many pleaders in the king's courts were clerks in holy orders; but this participation of the clergy in lay jurisdiction was discouraged by the Lateran Council, which prohibited them from acting as advocates in secular courts except in causes wherein they were themselves concerned or in causes of poor persons. The early *Year Books* show that in the thirteenth and fourteenth centuries a professional class of pleaders was taking shape and assuming a prominent part in the development of the common law. In this period a distinction was growing up between two groups of pleaders—the serjeants and the apprentices. The pleaders who clustered about the king's courts, some of whom were employed in the king's litigation, were called his serjeants (servants) at law. They were a small group who did most of the work of the court and they formed a closed order that lasted, in form at least, down to very recent times. There were also the apprentices, who intended to follow the profession of law. While in these early days the serjeants may have been responsible for the training of the apprentices and the selection of those who could practise in the courts, the system did not develop along these lines.

The rise of professional attorneys and pleaders in the thirteenth century began to have an important influence on the constitution of the common law bench. Both the pleaders and the attorneys came under the control of the judges. The early courts of common law had been recruited from the staff of royal administrators and ecclesiastics; but with the rise of the profession of pleaders the tendency grew to appoint common law judges from among them—in other words, from the bar rather than from the attorney class. The practise also became fixed of

recruiting the bench only from those pleaders who had risen to be serjeants at law.

During the fourteenth and fifteenth centuries the legal profession organized itself into its classic forms; and the monopoly of legal business which the profession as thus organized secured determined much of the character of common law developments. The serjeants at law and the judges, being at the head of the legal profession, exercised in several ways a general control over it. By the end of the fourteenth century the serjeants, selected by the king usually on nomination by the bench, constituted a close body in the nature of a guild; it had become the rule that only serjeants were eligible for appointment as common law judges; and their main privileges seem to have come into existence in this period. Their calling was viewed as a public office, as clearly appears from the oath which serjeants elect were required to take. Their entrance into their new rank was attended by long and costly ceremonies, in comparison with which the creation of a judge was an informal affair.

The serjeants and the judges were all brothers of the Order of the Coif and they lodged together in the Serjeants' Inns. Both in the judicial system and in society the serjeants held a position second only to the common law bench itself. They could practise before the council and the chancellor as well as before all the common law courts. Plucknett holds that the *Year Books*, the English mediaeval law reports, "are peculiarly and intimately connected with the order of serjeants"; that they were a series conducted under the direction of serjeants and for their use. Counsel in this period dealt directly with their lay clients; contracts with counsel were enforceable at law; and they could be sued for negligence in the conduct of their clients' cases.

Their common profession and common privileges formed the bonds uniting the serjeants at law in the Order of the Coif, which was comparable with the foreign guilds or fraternities of lawyers of the later Middle Ages. The serjeants and the judges stood apart at the head of the profession. The other members gradually organized themselves into the Inns of Court and the Inns of Chancery; in these Inns the serjeants had no part. The origins of the Inns of Court, to which the Inns of Chancery were attached or annexed, are lost in obscurity; but it is now known, says Sir Frederick Pollock, that at some time in the fourteenth century, probably in the first half of it, "the four Inns of Court, voluntary societies unchartered and without corporate

form, existed with closely similar constitutions, essentially such as they are now." The four Inns of Court were Lincoln's Inn, Gray's Inn, the Inner Temple and the Middle Temple; and it was the lesser Inns, about ten in number, which were known as Inns of Chancery. The mediaeval universities, Oxford and Cambridge, taught only civil and canon law; but for the teaching of English law the Inns of Court themselves formed, in Coke's words, "the most famous Universitie for profession of law . . . in the world." In the Inns the profession organized and educated itself; and by the middle of the fifteenth century these societies were in a flourishing condition. Membership of the Inns of Court consisted in the fourteenth and fifteenth centuries of several different classes or grades. There were, first of all, the "benchers" and "readers"; below them came the "utter-barristers"; then there were the youngest members, the "inner-barristers"; while in addition professional attorneys and clerks of the courts were also members in this period. In the fourteenth and fifteenth centuries the usual term for members of the bar (that is, pleaders) below the grade of serjeant was "apprentice"; and only after the Restoration was it supplanted by "barrister," which, properly speaking, signifies a man's standing within his Inn of Court. The term inner-barrister has long been superseded by "student." The organization of apprentices in the Inns of Court during the fourteenth and fifteenth centuries caused the later distinctions between students, barristers and attorneys to make their first appearance.

In the later Middle Ages the Inns of Court and of Chancery formed a "university" where students, for the most part of noble birth, learned not only English law but history, Scripture, music, dancing and other noblemen's pastimes. In Fortescue's day each of the four Inns of Court contained about two hundred students, while in each of the Inns of Chancery there were at least one hundred; so that at this time the university contained not fewer than eighteen hundred students. While other subjects were taught in them, the Inns of Court were primarily schools of English law; they were similar to the law schools of the great mediaeval universities. In each of the Inns of Court was a body, co-opted by themselves from among the members of the society, known as the benchers; and to the benchers was entrusted full administrative and educational control. The origin of the absolute and exclusive right of the Inns of Court to call to the bar is of much interest. The call

to the English bar was and still is a call to the bar of the Inn; and those thus called were and still are tacitly permitted by the judges to practise in the courts. It has been suggested by Holdsworth that the origins of this privileged position of the Inns of Court are to be found in the history of the Inns of Chancery. He thinks it "not unlikely that the serjeants and the judges, who desire to regulate and organize the legal profession, assisted the older apprentices, who governed these smaller Inns, to maintain order and to educate their juniors, by allowing those alone whom they called to the bar of the Inn to practise in the courts."

The mode of education in the Inns of Court was not unlike the analytical and dialectical methods of instruction followed at the universities of Oxford and Cambridge: it consisted in lectures and arguments. The solemn reading, with its accompanying disputation, in which members of the Inn took part, was followed on the same day after dinner and after supper by arguments and a moot. The benchers acted as judges, while two inner-barristers and two utter-barristers were counsel. The education thus given in the Inns was primarily of a practical kind, but theory was not entirely neglected; it was an education which trained students for their work at the bar and on the bench. The discipline and life of the Inns no less than their system of education were essentially collegiate.

In the fourteenth and fifteenth centuries attorneys, whose modern successors are solicitors, were rapidly becoming a distinct professional class; the old distinction between the attorney and the pleader was preserved. Attorneys became officers of the court, and as such they fell under the regulation and control of the court. They were nevertheless allowed to become members of the Inns and to plead their clients' cases in court. As in the time of Edward I attorneys and junior apprentices were classed together, and indeed junior apprentices acted at times as attorneys. Thus although the old legal distinction between the office of attorney and that of pleader was preserved it tended to grow fainter as professional attorneys rose to a more important position. As the duties and functions of an attorney and those of a pleader were more sharply differentiated, the two branches of the profession came more and more to stand in different relations to the judges. The distinction of status between the two was therefore strengthened. The Inns of Court and the judges not only discouraged the call of attorneys to the bar of

the Inns but excluded them altogether from it. As a result attorneys could not plead in court, for only call to the bar of an Inn of Court gave this privilege. Only the four Inns of Court had the right to call to the bar; and after the exclusion of attorneys from call they ceased to be members of the Inns of Court, being confined to the Inns of Chancery, which were in the nature of preparatory schools. Falling into the hands of the attorneys, who were known later as solicitors, the Inns of Chancery ultimately became mere social clubs of this branch of the profession.

It is obvious that some phases of the mediæval legal professions of both France and England may be traced back to common origins in Roman and Germanic institutions. Each of the professions also bears the stamp of its mediæval environment, especially with reference to guild organization, although the Order of Advocates in France was also largely indebted to Roman ideas, while the Order of the Coif and the Inns of Court in England possessed characteristics that were mainly Germanic in origin. Apart from these common features the legal professions of the two countries were marked by striking contrasts, due mainly in addition to the different cultural and psychological factors to the varying proportion of their individual indebtedness to Roman and canon law on the one hand and to Germanic and other native sources on the other. In most European countries the Romano-canonical factor in legal development was far more pronounced than in England; and hence enacted law, based to a considerable extent on the Roman codifications and the legislation of the popes and councils of the Roman Catholic church, became of far greater importance in continental countries than in England, where legal growth, founded primarily on Germanic and other native sources, was predominantly judicial in character and resulted in a system of case law.

The inchoate state of the early common law in continental countries meant that legal studies were limited to the mature systems of Roman and canon law; thus the university law schools, where alone these laws were taught, obtained a monopoly of legal education and the control of the legal profession. Trained in the Roman and canon law, the profession was influential in the reception of these cosmopolitan bodies of legal doctrine; and this reception added to other historical factors gradually produced new and vigorous systems of enacted law in all the continental countries. In England, on the other hand,

where the Roman and canon elements were less significant, legal education became a monopoly of the professional class, imbued in its practise with the common law; and lawyers were trained by the older members of the profession in the professional schools of the Inns of Court and of Chancery and not at the universities of Oxford and Cambridge, where only Roman and canon law were taught.

England because of the strength of the Norman and the Angevin monarchy had acquired centralized institutions and a systematic common law earlier than other kingdoms. The early common law was developed by royal judges who drew largely from native sources without any extensive influence of Roman and canon law, and the legal profession originated as an integral part of this historical process. Under these conditions the English bench and bar developed a professional organization consisting of two parts: the Inns of Court and of Chancery on the one hand and the Order of the Coif, restricted to the serjeants and the judges, on the other. On the continent the professional system developed in general on different lines: it gradually became the rule that practise did not, as in England, lead to the bench. Not only were the careers of the practitioner and of the judge separate and distinct, but lawyers of both classes were trained at the university law schools. The English universities also taught Roman and canon law, but under the common law system they offered little to a prospective practitioner in the courts.

Everywhere in Europe the rise of a secular and learned profession of law was one of the outstanding facts in the history of the later Middle Ages. Gaining its independence from church administrators of canon law, the legal profession not only exercised a vast influence in the molding of the law in all countries but it also did much to further the growth of the rising monarchies of the west. In this matter, however, as in so many others the English profession holds a place in history which marks it off from the profession in some of the continental countries; for although in the thirteenth, fourteenth and fifteenth centuries the English common lawyers were a force making for the growth of monarchical power, as time progressed the tendency toward absolutism, which was contrary to the spirit of the English common law, was chiefly fostered and supported by the civilians and canonists.

H. D. HAZELTINE

MODERN LEGAL EDUCATION. The end of the Middle Ages in England, France, Germany, Italy and Spain found an elaborately trained group of lawyers in complete control of a lucrative profession. In most countries these lawyers were organized locally into corporations or quasi-corporations and almost everywhere they were highly privileged. If they ranked merely as upper grade ministerial officials in most parts of Germany, they formed a sort of subnobility in England and northern France, while in Spain, in parts of southern France and in some Italian communities they were classed with the hereditary aristocracy. More than any other profession the law was the avenue to preferment and promotion in state and church.

It must be remembered, however, that this is true of only one branch of the profession. Throughout Europe the distinction was maintained between the *advocatus* and the *procurator*, the legal patron and adviser and the legal agent. The *procurator* was also often a member of a guild, but it was the *advocatus* who claimed and received the right to be the legal expert proper and the privileges associated with it. Access to such privileges was inevitably restricted, and the restriction was made by means of educational tests. Almost everywhere in Europe the general test was the possession of a university training. Even in England, where university training was not obligatory, it was in fact possessed by almost all lawyers—at any rate by almost all barristers, the English equivalent of the European advocates. Elsewhere for the *advocatus*—*Anwalt*, *avocat*, *avvocato*, *abogado*—a university education and its symbol, the university degree, were prerequisite. This university training was usually supplemented by a more or less organized apprenticeship, in which the recently graduated lawyer learned the rudiments of his craft. Often the apprenticeship was no more than a close association with older adepts or the frequent observation of the conduct of legal business. But the association and observation were as often as not compulsory in fact, and in Paris they were combined with actual lectures held in the guild-hall or what corresponded to it.

Evidently this training tended to make a full mind. The law was apparently contained in books, and devices to facilitate the use of books were poor and inadequate. The result was that those who had subjected their memories to the severe tax necessary to acquire the law were prone enough to add the arrogance of learning to the arrogance of lucrative privilege. Lawyers

were frequently scholastic pedants, a condition aggravated by the fact that their authoritative texts were in a learned language and that even in the vernacular their technical terminology was incomprehensible to the layman. On the other hand, the constant assignment of these scholastically trained lawyers to the task of active administration emphasized vigorously the practical goal of all legal training. Further there were specialists whose interest in branches of the law was nicely graduated. Besides the decretists, legists, feudists, *coutumistes*, there were men who were better at presentation than at research, at exposition than at argumentation. For all these men—administrators, teachers, specialists—the training, except for variations in the apprenticeship, was practically the same and no appreciable change was made in this unity of training until well on into the period after the French Revolution.

The Enlightenment and the beginnings of scientific criticism in the seventeenth and eighteenth centuries profoundly affected the character of legal teaching. The basis of law was no longer the semi-inspired utterance of a book but a hypostatized reason or natural law, of which the Roman law as enunciated in the *Corpus juris* was but a historical approximation, although concededly the closest approximation the human intellect had so far achieved. The beginnings of historical jurisprudence, which run from Baudouin and G. B. Vico to Hugo and Savigny, far from breaking the hold of the Roman law on continental legal teaching served only to strengthen it. It was the historian Savigny who successfully resisted the attempt of the pandectist Thibaut to establish a new code on scientific and modern principles.

The breach in the intrenched position of what might be called scholastic law was made by the French Revolution and was prepared by the intellectual movements that are symbolized by the names of Rousseau and Montesquieu. To the revolutionary leaders the legal system was an integral part of the feudal structure—a privileged corporation administering a mystery in the interests of king, church and nobles. The corporation was abolished root and branch by the Legislative Assembly, and the study of law as a special discipline was discontinued. Both were reestablished by Napoleon and both were confronted with the wholly new task of examining and administering the new *Code civil*, one of the finest and most lasting fruits of a revolution which thought it had permanently and immu-

tably established the freedom of the citizen and the rights of property. The code became the essential of legal teaching, and the study of Roman law was made an auxiliary branch of instruction, emphasized and obligatory but ranking merely first in a group of subjects which included legal history, criminal law, commercial law, political economy and later several aspects of the new sciences of public, administrative and international law. It became clear that the entire curriculum could no longer be mastered by every student. The need for making a selection involved a specialization of professional interests in the preparatory work.

The other continental countries followed very slowly in the wake of France. In Spain, Switzerland and the Scandinavian countries Roman law, however completely recognized as underlying the legal structure, had none the less never formed the major element in legal teaching. That place had been occupied by national codes or customals, none of which pretended to the completeness or scientific value of the French code. Within the nineteenth century the French code, the French judicial system and substantially the French organization of legal teaching were adopted in Spain, Italy, Belgium, Holland and Rumania, suffering minor changes in these various communities, especially in Spain.

In Germany, the *usus modernus Pandectarum*, humanized by Vangerow, Savigny and Jhering but none the less characterized by subjection to Roman law, seemed in the first half of the nineteenth century to be in permanent control of legal instruction. But the Germanist movement, driven by both patriotic and historical impulses and able to match the names of the great Romanists with names like Grimm, Heusler, Schröder, Brunner and Sohm, had inspired a large number of young jurists with a lively interest in German law, which had previously been a slighted auxiliary discipline. The unification of Germany in 1870 made the ultimate codification of the private law a certainty, and the active preparation of a code could not fail to push Roman law out of its privileged position. While the dominance of Windscheid in Germany and of Unger in Austria gave an enormous importance to the Roman elements in the new code—an importance which the final revision did not completely eradicate—it was inevitable that the code of 1900 should revolutionize legal education in Germany. A system of instruction by which the Pandects were taught to practically every student for ten hours every week for at

least a year was forced to yield to one in which Roman law proper was relegated to the place of an interesting but unessential illustrative subject. Radicals joined conservative Germanists in inveighing against the incubus of the *Corpus juris*, and the reduction of Romanistic studies proceeded far more rapidly than had been the case in France. The movement to make them entirely optional acquired appreciable force before the World War.

But long before the code the weakness of the scholastic type of legal training had been noted. Nor was the training any less scholastic when an annotated code took the place of an authoritative textbook on the Pandects. Jhering and after him Zitelmann attempted to provide for practical instruction on a systematic scale within the ordinary scheme of legal training. Their success was slight and the study of law remained in Germany and in all continental countries—as it still is in large measure—one in which an enormous mass of doctrine must be learned by heart and retained in memory. Lectures are often dictated, circulated in mimeographed form or printed, and the correct reproduction of statements to be found in these lectures is the standard of success in legal education.

It is almost a truism that there is only a moderate correlation between success or utility in professional practise and the mere amassing of information. To train the faculties which make for the effective use of legal knowledge some sort of apprenticeship has always been necessary. The problem has been to determine whether the three most readily distinguishable applications of professional skill, those of the judge, the advocate and the law teacher, should early be segregated in such apprenticeship. This segregation has been most completely effected in Germany and least in England and the United States.

The German system is typical of the separation of the judge and the advocate. As *Referendar* the young advocate gets his practical connection with official procedure and under supervision makes his first contacts with clients. After two or three years as *Referendar* he is confronted with the choice of joining the ranks of the practising lawyer or entering the judicial career as assessor. While the examination he takes is the same in either case—the fitness to be a judge is the test of admission to all the ranks of the legal profession—the paths which diverge at the beginning of professional life rarely reunite. There is little opportunity to pass from one career to

the other, and even more rarely is there a passage from either branch of the purely professional careers to the doctrinal, except in specialties which do not occupy the full academic time of a professor of law. The reverse, however, is far commoner, particularly in France and Italy, where eminent professors of law are freely utilized on public and private occasions—a practise which has been gaining ground in post-war Germany.

Legal education in England concerns itself principally with that of barristers. Attorneys or solicitors—the mediaeval procurators—were formerly trained almost exclusively by a direct system of apprenticeship. The amount of general education of these attorney's clerks varied enormously, but only in the upper reaches of this group were there any considerable number of men trained in public schools or in the universities. The Incorporated Law Society, first founded in 1825, gave its first examination for prospective solicitors in 1836 but did not receive official recognition and authority until the passage of the Solicitors' Act of 1877.

The control of the education of the barrister (*advocatus*) by the Inns of Court had been part of the guild organization of mediaeval English society, except that the members of the Inns were recruited in the main from classes distinctly higher than those which entered other guilds. But the Inns decayed rapidly in the seventeenth century, and such legal education as English barristers received in this century and the eighteenth was casual and almost optional. Manuals like those of Fulbeck, William Phillips, Roger North—all in the seventeenth century—were addressed to people who might avail themselves of the proffered advice or reject it as they chose. Lectures in the Inns had lapsed; examinations were unknown. Reading for the law under the guidance of an established barrister was common, but this relationship was sharply severed from the indentured apprenticeship of the attorney's clerk. It was not until the establishment in 1852 of the Council of Legal Education, composed of twenty judges and barristers, that examinations became obligatory, a system which was further regulated in 1871. The English barrister must now pass satisfactory tests in Roman law, constitutional law and legal history, evidence and civil procedure, criminal law, property law, contracts and torts, equity and, finally, the common law. These examinations have increased in rigor and guarantee a moderate amount of sifted information on the topics

covered. In addition the council has established a system of law lectures, but attendance is not a prerequisite for taking the bar examinations. The practical apprenticeship is left to individual choice. There is nothing to prevent the duly admitted barrister from beginning practise promptly. The only vestige of the guild control is now found in the requirement for university trained lawyers to "keep" four terms in one of the Inns for three years.

University lectures in English law began at Oxford in 1753 with Blackstone, although lectures in Roman and civil law had long been given to aspirants for Doctors' Commons and the Court of the Admiral. The Downing professorship at Cambridge was established in 1800. Enormously influential as were Blackstone's commentaries in their published form (1765), especially in America, the number of English lawyers who came directly under the influence of university training in law was small. This situation, however, has changed rapidly; the law courses at Oxford and Cambridge are now well attended. London University has an active school of law and other universities, like Manchester and Birmingham, are equally well provided. The foundation in 1908 of the Society of Public Teachers of Law gave public expression to the new character of English law teaching, and there seems little doubt that in a very short time all English barristers will have received a university training in their special field. With the university training there is involved the preliminary general education which is the requirement for matriculation at any English college or university. In this preliminary education classical studies are rapidly receding, although they still figure prominently. In this training the important fact, however, is that there is no attempt to reach into the pre-university schools to segregate future lawyers by any system of prelegal studies. It is recognized that the best preparation for the study of law is the possession of the culture common to the general group of educated men.

The study of law in America followed a course quite its own. The colonists of New England carried with them the bitter Puritan hostility to the common law and to lawyers in general. A special training for law was obviously unnecessary when the only proper source of law was "Moses His Judicials," available to every reader of the Bible. In the other colonies a special need for trained lawyers did not seem apparent when the very application to the colonies of the com-

mon law was in great doubt. During the eighteenth century the common law was discovered to be the source of English liberties and there set in and advanced rapidly the process of what was in effect a "reception." Lawyers admitted to the Inns—despite the relative insignificance of the Inns in England during the eighteenth century—were in increasing demand. Between 1760 and the end of the revolution some one hundred and fifteen Americans are said to have been so admitted, mostly from the southern colonies. At any rate there was an appreciable number of trained lawyers in the colonies in whose offices local aspirants could obtain the needed apprenticeship. Books like Coke's *Institutes* and Finch's *Law* were available as well as a number of English law reports, but the immediate success of Blackstone's *Commentaries* in the decades directly preceding the revolution made it possible for any industrious person to get what seemed to be a complete knowledge of the whole legal system, which required only supplementing by actual practise. Men like Story and Kent were so trained even after the revolution.

Private and undirected study and practical experience gained by voluntary and casual clerkship have constituted until very nearly the present time the prevailing method of legal study in the United States. It is only recently that bar examinations have been established and still more recently that any requirements of general education have been imposed. The American Bar Association almost since its inception has labored vigorously for the improvement of legal education and has gained general acceptance in theory for a program of preparatory studies which covers not merely the American high school but the first two years of collegiate instruction. These requirements, however, are far from being completely realized either in practise or in legislative enactment. The premise of equality of opportunity contained in the democratic theory, especially in the western states, and the laissez faire attitude prevalent throughout the United States have been powerful influences working against specialized training for law. The traditional hostility of laymen to an organized profession of experts is still the source of strong opposition to a thoroughgoing reform of the system of legal education. One state, Indiana, maintains in its constitution the right of any citizen to practise law. But the facts of the situation are forcing a gradual acceptance of proposals to increase the number and quality of the

preparatory requirements for the study of law, if only in view of the economic pressure created by a vastly overcrowded profession.

It must be noted that the distinction between barrister and attorney, the *advocatus* and *procurator* of Europe, has never prevailed in the United States. The absorption of the duly trained lawyer in the routine and ministerial duties of the solicitor has exaggerated the practical and business aspects of the law and placed obstacles in the way of setting university requirements for legal training. The study of law in the United States has, however, been a feature of university curricula for a long period. Apparently the first lectures were delivered by Chancellor Wythe in William and Mary's College in 1779. The Litchfield Law School, from which the Yale Law School claims descent, was established in 1782 or 1784. In 1815 Judge Isaac Parker was appointed the first Royall professor of law at Harvard. In 1829 Joseph Story was made first Dane professor of law at Harvard with a commission to teach law of nature, law of nations, maritime law, equity and constitutional law. Francis Lieber at Columbia in 1857 gave a reputation to a school which under Timothy Dwight reached a high degree of efficiency.

But university law training long remained the optional and almost ornamental accomplishment of a small number of lawyers. This number, however, soon increased as the intellectual frontiers receded. The apocryphal story of Lincoln's first contact with college trained lawyers is a symbol of the change in point of view. In 1833, when Litchfield closed, there were about 150 law school students in the United States. In 1915 there were over 20,000 in about 140 schools; the number at present is a multiple of this figure. But it is only within the last half generation that a majority of the members even of the Supreme Court of the United States have been men trained in law schools. The need at present is the discrimination of law schools which give a real instruction in law from those which are mere "cram" schools for the bar examination. The Association of American Law Schools is based on the attempt to make such a discrimination and has proved an effective stimulus.

Doubtless the most important contribution of the United States to legal teaching is the "case method." This was first established at Harvard in 1870 by C. C. Langdell and developed by a group of brilliant teachers, among them Ames and Gray. Keener, a pupil of Langdell, estab-

lished the case method in Columbia, and practically all important law schools in the country have since adopted it. The case method is based on the study of selected cases in one or another of the recognized topics of law, such as contracts, torts or property. These cases are derived from various common law jurisdictions and are arranged systematically and historically. The method was based by Langdell himself on the two principles that all the law was in books and that it could be studied inductively. Both statements are inaccurate. No true induction can be carried on by means of a selection made for the students by the author of a textbook. The real value of the case method lies in the very opposite direction. Its proper application necessitates a high development of a dialectic technique, which the Dwight method despite the fact that it was called Socratic only partially called into operation. Further it produced in the students an ardor for argumentation and an aptitude for fine distinctions which have always been taken to be characteristic legal virtues.

The weakness of the case method may be said to lie in the fundamental fallacy that the law is exclusively to be found in books. This defect was aggravated by the limitation to which the Langdell school was prone—that the books used were always collections of reports. In this way the common lawyer's prejudice against statutes and his contempt for social custom which had not reached the prescriptive stage was prejudicially fostered. And the prejudice was the greater in the face of almost revolutionary economic changes and the piecemeal codifications which in America attempted to compensate for the rejection of more ambitious efforts at establishing a code. Moreover the selection of cases was inevitably subjective. The Langdell-Ames casebooks unduly emphasized England and Massachusetts. Under any circumstances the selected cases could at best be a fragmentary and miscellaneous assortment of legal propositions. Only a vigorous and keen dialectic could turn them into a means of presenting any subject completely. The supplementing of selected cases by brief doctrinal discussions in the casebook itself was not a particularly successful makeshift. A new departure has recently been advocated by those who would add other illustrative materials to the teaching instrumentality—documents, commercial records, economic and social statistics and the like. On the other hand, since the case method evidently does not depend upon existing categories of legal classification, it is likely that in the hands

of competent men it will still prove the most fruitful and stimulating method in legal training. It has made very little headway in English law schools, where the scholastic method of doctrinal lectures tested by examination is still in vogue. An interesting attempt to apply it in the civil law on a small scale resulted in the *Espèces choisies*, edited by Henri Capitant and Édouard Lambert (2nd ed. Paris 1927). But although it has been greeted with interest the method itself has not been allowed a real entrance into actual teaching on the continent.

Legal education in the Latin American countries has tended to model itself on France rather than on Spain. Even more than in France, however, the study of law in the universities has been not so much a preparation for the practise of a specialized profession as a general avenue to all branches of public life. The great interest of South American countries in international law has given that subject so large a place in the curriculum that it often happens that there are as many as five chairs of international law in the larger universities.

Before the Bolshevik revolution Russia's system of legal education was also modeled on that of France; Russian lawyers were frequently trained in Paris. One of the first acts of the Soviets was an attempt to abolish completely the entire profession of law. As far as formal teaching of law is concerned the prohibition is still in force, but in view of the constantly mounting accumulation of new legal material in the form of codes, commentaries and reported cases the gradual rise of self-trained specialists in these matters is almost inevitable. A recognizable group of such specialists is in fact already to be found in the Soviet Union.

In the Far East the fundamental difference between western and eastern methods is at once apparent. In Japan and many parts of India the western organization of judicial administration was taken over almost in its entirety. Japanese lawyers are at present trained in law schools closely resembling the law faculties of German universities. Indian lawyers attend lectures like those now given in the law schools of Oxford or Cambridge and a great many of them are admitted at the Inns of Court in England. But in China and those other parts of the Orient in which native conditions persist a profession of law is impossible, since law itself is not dissociated from the general communal customs, which are at the same time religious, moral and legal. Courts in a real sense do not exist. The

authority of elders and headmen is that of arbitrators, although a powerful public opinion gives their arbitraments a sanction at least as strong as that of a western judgment. It is evidently impossible to prepare for functions which are so undifferentiated as those of elder or headman, particularly when these are not offices to be gained by personal effort. None the less it is clear that among responsible Chinese officials there have been individuals particularly interested in the legal as distinct from other traditions and particularly adept at determining controversies. While such men are called lawyers, it is not likely that without the impulse from the West they would ever have developed into a separate profession.

The quality of law existing in any country depends exclusively on the quality of those who administer the law, including administrators proper as well as judges, although the functions of these two groups are never completely differentiated. To the extent, however, that they are differentiated the development of a group of legal experts who plead before the courts and advise litigants is almost inevitable, and it is almost equally inevitable that the courts will be in great measure manned by former pleaders.

Under these circumstances the education of lawyers is the education of judges and determines the quality of that part of the law which judges administer—a part which in English speaking countries is much larger than that of any other agency. If lawyers form a guildlike corporation, a craft or a mystery—and the very limitation of their members and the restrictive requirements of their selection makes this hard to avoid—it is obvious that there is a constant risk of dissociation of the law from the rest of the intellectual, social and economic life of the community. The mere addition of new disciplines to the legal curriculum cannot lessen this danger. Since all social relations are potentially legal, a complete legal curriculum would in theory contain almost every branch of human thought or activity. The continental practise of including economics and politics in the legal curriculum has had an appreciable effect, but it has not solved the problem, since thorough command of these subjects divorces men from legal practise and turns them into other activities.

It may be questioned whether a sociological approach to legal studies is very much more promising. A trained profession demands a technique, a technical vocabulary and a common

fund of technical information, the acquisition of which must always remain the chief purpose of a legal training. The sociological approach ordinarily means little more than a radical revision of the categories into which the legal material has traditionally been cast. Such a revision has the salutary effect of stirring new enthusiasms and discarding obsolete survivals. But unless it is sufficiently thoroughgoing to change the quality of the thinking done by judges and lawyers it cannot crucially affect the character of the law—at any rate in England or the United States. The movements already under way—those which look to the lengthening and broadening of the preliminary education of lawyers and those which attempt to utilize other than book materials as the instrumentalities of legal teaching—give some promise of success. But there is still the possibility that this trend may result in a renewal of the guild type of profession, privileged and aloof, which the community will undoubtedly view with suspicion and dislike. Perhaps methods can be devised to increase the sense of responsibility of the organized bar and judiciary to the community. But it is doubtful whether such a result can be obtained by any device of formal education.

MAX RADIN

MODERN LEGAL PROFESSION. A survey of the legal profession of modern times shows the need in every country of a group equipped to deal with the complex problems of law and administration under the wide variety of institutional set ups. But this group is rarely popular. In Russia a body of theorists, practitioners and administrators of the old regime were swept away by the Soviet state on the theory that they could be dispensed with in a non-exploitative society; yet the multiplication of administrative machinery and the need for interpreting rules and applying some process of justice called back into existence in fact, if not formally, a profession skilled in interpreting the regulation of a communist system. There have been other cases in continental Europe of similar hostility to the legal profession—notably in France during the revolution. In that case too the lawyers were identified in the minds of the revolutionists with the entire system of oppression and privilege of the *ancien régime*. But the profession has invariably reemerged.

In civilizations like the west European, dominated by economic and psychological individualism, the advocate is the fine flower of the bar;

leaders of the profession are engaged rather in arguing the rights of the individual before criminal courts than in handling the rights of individuals in civil suits. The continuity of the historic drive from the code of Justinian through the *Code Napoléon* and into the modern French, German and Italian codes has maintained a uniformity of position as between the barrister in Europe and the Byzantine logothete of the later, particularly the Eastern Roman Empire. The need for reconciling the importance of the individual with the demands of a crowded, close knit society has also thrust the legal philosopher into prominence. Continental Europe unlike eastern Europe or the common law countries has also a separate category for lawyers who are to be judges. In the common law system the judges are recruited from the legal profession, without, however, any special training for the function; in continental systems one line of legal training leads to the judicial posts exactly as another line leads from apprenticeship through the grades of attorney and counselor to the dignity of the barrister.

In both England and the United States the dominance of the commercial and industrial structures, the complexity of business organization and the position of world economic leadership steadily thrust upon the legal profession problem after problem which was not originally intended to form a part of legal practise. In both countries the legal profession in addition to exercising its historic monopoly over control of the machinery of the courts and over the giving of private counsel to parties with respect to their legal rights became virtually an intellectual jobber and contractor in business matters. The British system, seeking to preserve the ancient supremacy of the barrister, kept the two functions separate within the profession (and incidentally separated the bar even from its clients) by assigning the legal burden of the new economic system to solicitors—men trained differently from the barristers and not privileged to practise before courts but skilled in interpreting law, drafting documents, handling the many problems of conveyancing a property, organizing business enterprises, securing the orderly course of credits and managing the entire paper work of commerce. In the United States no such distinction was formally made. In theory all lawyers were alike; all had the same rights and were supposed to be able to perform the same duties. In fact, however, the functions diverge as they do in England, so that one branch of the Ameri-

can profession, rarely appearing in the courts, devotes itself to handling business matters, giving business counsel, drafting documents and the like; another branch to handling litigious matters, trying cases in the courts and working the judicial machinery. Still others develop specialties—patent law, admiralty law, customs and tariff matters—and practise before various administrative tribunals. The division is informal and one of choice but none the less real.

The position of the legal profession in American life illustrates in clearest relief the consequences for the profession of the rapid industrial and financial growth of the community. One of the results of capitalistic organization in the United States lay in the transfer some time toward the end of the nineteenth century of the responsible leadership in social development from the lawyer to the business man; at the same time the position of the lawyer had an even greater appeal than before. It remained one of the careers through which a man could attain influence and wealth even without having capital at the start; and the fortunes accumulated by a few men at the bar were taken as an index of its normal possibilities. Since the prevalent democratic philosophy made entrance to a profession not the privilege of a small group but the right of any individual, subject only to minimum standards of education and training, the number of those who entered upon the study of law increased enormously.

This coincided with the period of great industrial development and rapid exploitation of resources. The manipulations of the railroad builders, the oil pioneers, the utilities and traction magnates, and the accompanying political corruption were tolerated by the community because they seemed to be connected with an unparalleled rise of the mechanisms of industry, transportation and urban life. In defending, legalizing and maintaining this exploitative development the legal profession found its principal function. Many of the great American law firms of today, recognized as the leaders of the bar, owe their origin to the safe navigation of clients through some scandal of the latter part of the nineteenth century: the defense of the Tweed ring, the safeguarding of the interests of Jay Gould in Erie, the wreck of the *Pere Marquette* railroad and the violences of the Harri-man administration, the wreck of the Rock Island railroad. The impression grew that the lawyer existed to serve and not to counsel his clients.

The law firm became virtually an annex to some group of financial promoters, manipulators or industrialists; and such firms have dominated the organized profession, although they have contributed little of thought, less of philosophy and nothing at all of responsibility or idealism. What they have contributed, however, is the creation of a legal framework for the new economic system, built largely around the modern corporation, the division of ownership of industrial property from control and the increasing concentration of economic power in the industrial east in the hands of a few individuals. In the western part of the United States this movement has been less thoroughgoing, probably because the nuclei of the new national organization lay primarily in the east, save for a few centers in the middle west and on the Pacific coast.

The rise of the business, or corporation, lawyer in the United States as the fine flower of the profession almost of necessity produced its reaction. Some men, like Justice Brandeis, after attaining primacy in that branch of the profession revolted from the cynicism of its views, developed a philosophy of the protection of individual rights and made their national reputations in pleading, often without pay, causes which turned on the protection of the public against exploitation by private groups. This revolt indicated that the problem was as much economic and philosophical as legal: the law can do little more than reflect and bring into order the current mores and aggregated desires of individuals. To make action effective the lawyer who had public interests was forced either to turn to his books and become a scholar or to turn to public life and go on the bench or into political office. But political participation was a two-edged instrument. The forces of financial concentration needed political influence quite as much as they did legal ability; and the lawyer who was successful in public life was all the more valuable to them. The common result was that after a relatively brief period of public office the lawyer returned to his profession with enhanced reputation and became a more effective servant of the evolving industrial scheme. The lawyer as statesman or public officer too readily yielded to the temptations of the lawyer as practitioner and interpreted or served the business groups instead of furnishing a statesmanlike leadership. He conceived of himself as a technician rather than an originator of policy.

A third and more recent tendency is illustrated by those lawyers who seek rather to be

scholars at the bar than great commercialists and who aim to mold legal doctrines through study, research, writing and teaching, translating them into legal reality through practise either private or for various public bodies. The mere technicians leave little trace behind; but the lawyer-scholars may exercise a real influence on the legal profession. The literature of the law falls very largely to them and to teachers and judges.

A cross section of the legal profession of today would show a hierarchy of activities. At the top is the "legal factory"—the great corporation offices of New York and Chicago, having thirty or forty partners and perhaps two hundred or more associated attorneys, and doing a volume of business of several millions a year. The tremendous overhead requires the assurance of a steady flow of a large volume of business; these institutions are therefore largely adjuncts to the great commercial and investment banks; and they use that connection to divert to themselves a portion of the funds flowing through the banking system. To some extent also their profits are due to the use of cheap labor in the form of young lawyers recently graduated, of whom a new crop is available every year. Such offices are not distinguished in the courts; they act chiefly as financial experts and draftsmen of financial papers. They have contributed little to legal literature, social responsibility or public leadership; but they have been highly profitable and have safeguarded the position of the new business organizations. Not infrequently they have used political connections to procure or defeat legislation—flagrantly in the case of the Delaware Corporation Act of 1929—and in large measure they dominate the bar associations and professional organizations. Below them are the smaller offices, also in the cities, composed of from three to fifteen or twenty lawyers. These men are more often found in the courts; they are lawyers rather than solicitors and have contributed considerably more than have the "law factories" to business life and to community development. Particularly in the smaller cities and towns they divide their activities between the practise of law and participation in politics. It is from this group that the scholars at the bar are largely recruited. Below this group are the vast majority of lawyers, practising alone or in partnership with another, primarily handling the affairs of individuals and small businesses. They run the entire gamut from the lawyer who seeks chiefly to be a human being to the marching lawyer, who finds it necessary to make his living

by dubious means, chasing ambulances or carrying on doubtful litigation for revenue only. While the upper limits of this class frequently produce unexceptionable individuals, the lower limits in the great cities lie dangerously close to the criminal class.

There has grown up a specialized group of lawyers who devote all their time to law teaching, thus marking a change in the original theory of legal education, by which teachers were recruited from practitioners and almost always divided their time between active practise and teaching. Dean Langdell of the Harvard Law School urged training exclusively for teaching, and his pupil James Barr Ames—who studied law, was admitted to the bar, went at once into the faculty of the Harvard Law School and continued there throughout his life—inaugurated a new trend. Following him teachers have gone directly into most of the better known law schools, with little or no preliminary practise but with a technical membership in the bar. The strength of this arrangement lies in the opportunity of the teachers, untroubled by the pushing of private interests and the bias of alliances, to develop theory for its own sake; its weakness lies in the widening of the division between the theory of the law and its practical results.

There are indications that the lawyer-teacher or lawyer-scholar is tending to attain in the United States a position analogous to that of the great commentators in the civil law systems. With each of the forty-eight states rendering judgments which serve as case precedents and with the added precedents set up by the federal courts the task of creating a coherent system out of the multiplicity of legal premise and the variety of decisions becomes a huge one. The work of these men, as contained in textbooks, law review articles, research and such projects as the American Law Institute (*q.v.*), has been increasingly recognized by the courts, and the legal scholar is gradually establishing a strong position as the true maker of American law. On the European continent also the highest precedent is the commentary of the trained legal scholar; but there the decisions of the courts are only secondary, and the influence of the scholar is traditional rather than empirical. In England, where the body of case law remains small and is susceptible of being made coherent by the logical processes of courts, the function of the lawyer-scholar is still not so important as in the United States.

The differences of training under various sys-

tems have considerable influence on the character of the legal profession. In England the prospective lawyer begins with the foundation of a general classical education, continues by "reading the law" in one of the Inns, is examined as to his qualifications and is then called to the bar. But it is extremely unlikely that for many years he will make a living by his professional activity. He enters the office of a barrister and "devils" for him for a period of years, occasionally receiving an opportunity to argue a case when his senior is absent or when the point is not important. Finally he is "briefed" by a solicitor who seeks an able man without the expense of a famous lawyer, and thus after a decade of experience he really begins the practise of law. The profession is therefore small, limited to men who at the beginning at least have independent means, and it remains in the hands of a highly select group. On the continent the educational system, although widely different in detail, has much the same effect on the character of the profession. In France, for example, the recognized competitive examinations of the universities, the careful examination by the technical schools, the virtual impossibility of establishing a practise except through relationship with an already established lawyer or the purchase of his clientele, tend to limit the legal group to a hereditary or carefully selected class. In the United States, on the other hand, where the idea of equality of opportunity has called for freedom of professional choice, the raising of standards of admission to the bar has been a long, slow process opposed at every turn. The fact that a large part of American practise is made up of common sense negotiations rather than extreme technical skill has tended to favor this view. A number of states, notably New York, have raised standards by requiring a certain amount of university work and by superimposing upon the legal degree the requirement of a year's clerkship in the office of a recognized lawyer. It cannot be said as yet, however, that the gradually rising standards for admission to the bar have tended to produce a small coherent group as in England or France. Actually the confinement of the profession to men who are both able and qualified is most likely to take place through sheer economic pressure. The fact that great numbers of lawyers without considerable educational preparation find it difficult to make a living will do much to make the profession again a restricted and more or less privileged group.

The cohesion characteristic of the legal pro-

fession in England found expression also in the American profession in the earlier days, and although it has completely broken down in the larger cities it still continues in the smaller communities. Even where it has preserved its cohesion, however, the bar has changed in character; from an organization concerned primarily with maintaining the dignity and serviceableness of a profession it has become a substantial agreement among attorneys to protect each other. Where the cohesion has broken down, there is no organized opinion of the bar to exercise an effective control. The financial lawyers pursue their own system of ethics. The political lawyers commonly maintain their standing through influence with the courts or with the government; in cities like New York and Chicago courts and state and city officials maintain lists of such lawyers, whom they reward for their party services with profitable business. Criminal defense lawyers vary all the way from men who specialize in handling criminal matters with entire honor to men who deal with the underworld on a basis of familiarity almost amounting to membership. The bar through its canons of ethics and by securing the adoption of statutes specifically condemns such practises as ambulance chasing, soliciting of clients and advertising and from time to time in spasmodic activity disbars those guilty of them. But essentially the system continues without much change from year to year, since proof is difficult and the business of the bar is after all to care for its clients.

This has not always been the philosophy of the profession. The historic view was that a lawyer was an officer of the court and therefore an integral part of the scheme of justice. But the conception of the lawyer now obtaining is that he is the paid servant of his client, justified in using any technical lever that the law supplies in order to forward the latter's interest. Reliance is placed on the fact that the opposing interest may pull an opposite set of levers and that in the resulting equilibrium approximate justice will be performed. In the field of the large corporations, with their great concentration of power in the hands of a few men, this point of view has been disastrous for professional standards and public welfare. The financial interests are amply represented by legal skill, while the vast disorganized public, composed of investors, workers and consumers, is not represented at all.

The complete commercialization of the American bar has stripped it of any social functions

it might have performed for individuals without wealth. The great law office either does not care to or cannot profitably handle cases which, while of great importance to individuals, have only limited financial significance. The smaller offices and individual practitioners, especially if they are struggling for survival, will extract the maximum compensation from their clients, whether the service is worth it or not. Criminal cases are not infrequently prolonged for the sole purpose of procuring fees. One of the worst abuses has grown up in the administration of property left in trust: a lawyer who acts as attorney for the trustee or who has some other connection with the estate will often create litigation wherever possible, delaying the fulfilment of the trust and taking advantage of every technical obstacle in order to create work for himself, and ultimately dissipate the estate in fees.

Thus the importance and influence of the bar in American life have been distinctly modified by its changing standards. In the early history of the United States there was a tradition that lawyers were fit material for politics or statesmanship. They occupied a dominant ethical position analogous to that of clergymen and received a social recognition not given to the business classes. Their services in the formation of the early state are exemplified by men like Chief Justice Marshall on the bench and Daniel Webster at the bar and in politics, who could and did mold the economic and political institutions of the country. With the rise of the industrial system and the tremendous drive for economic development occasioned by the opening up of the west leadership was shifted to the captains of industry and finance; and the influential leaders of the bar became adjunct to this group rather than an independent influence. Traditions of public service, such as are found in the medical profession, insensibly disappeared; the specialized learning of the lawyer was his private stock in trade to be exploited for his private benefit. This is roughly the position of the profession today. Intellectually the profession commanded and still commands respect, but it is the respect for an intellectual jobber and contractor rather than for a moral force. The leading lawyers, especially those who are the heads of the great law factories, must be able to please or serve the large economic groups and they become therefore extremely skilled technicians. They rarely dare and usually do not wish to attempt to influence either the development of the law or the activity of their clients, except

along the line which the commercial interests of their clients may dictate. In this respect the American bar suffers in comparison with either the English or the continental system. The British barrister and the French or German advocate retain their liberty of action; they are not usually under permanent retainer from a series of economic interests whose economic and commercial ideals they are almost bound to assume.

The popular attitude toward the legal profession, never particularly favorable, has recently grown even more cynical. The general futility of litigation has given rise to the view that the principal benefit derived from a lawsuit is that the controversy is ended rather than that justice is done. The declaration required of the candidate for admission to the New York State bar, "I will never . . . delay any man's cause for lucre or malice," is not seriously regarded by the public. Despite this there is a public respect for the mental versatility and ability of the bar; its genius for getting results and its peculiar facility for tackling and untangling complex situations are almost summed up in the popular assumption that a lawyer can do anything, although the process is expensive.

In commercial life in America a vivid reaction has taken place against the whole legal process. Trade associations quite usually endeavor to arrange for arbitration between their members, and boards of arbitrators frequently avoid the intervention of lawyers. In some states, especially in inferior courts, it is prescribed that certain judges shall not be legally trained. The endeavor to escape the legal tribunal through administrative boards has been constant. But in all these processes the lawyer tends to reappear, simply because the job of analyzing a difficult set of facts and of presenting it clearly and with reasonable science calls for a specialized training and for a type of mind not possessed by many business men.

Certain groups of lawyers have undertaken various activities which indicate a possible socialization of the profession, not unlike tendencies in the medical profession. The movements for legal aid (*q.v.*) are supplemented by a large amount of unpaid volunteer legal work by private members of the bar. This includes also the furnishing of defense counsel, acting without pay, to undefended individuals accused of crime; and the "public defender" movement is a step in the same direction. Although the extent of such volunteer work has never received adequate recognition, it has probably contributed

more than any other single force to the stability of the bar.

In the economic sphere, however, socialization of the legal profession is almost a contradiction in terms. If property is not socialized, it is difficult to demand that legal services for the settlement of questions concerned with property be socialized. Another area as yet untouched by socialization—and the one which probably needs it most—is the field of family relations. This forms one of the most delicate parts of the social fabric and has been deemed too controversial (divorce, for example, being disapproved by many religious sects) to permit of handling by charitable organizations. The effect has been to leave this type of practise to the least regarded group of the bar, whereas logically it belongs in the hands of the ablest, most sensitive and most responsible group.

The legal profession has been regarded as the intellectual tie between functioning economic and social institutions on the one hand and organized legal administration on the other. This relation admits of two possibilities. One is that the profession merely does what the institutional set up appears to demand. The other is that it can assist in transforming the underlying potentialities in ethical and economic attitudes into actual results in the form of social and legal organization. In the United States the profession has tended strongly to the former function; in England and on the continent, to the latter. Signs are not wanting, however, that even in the United States the direction of the new economic trends indicates the need for a stronger intellectual guidance from the legal profession.

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See: LAW; JUDICIARY; COURTS; JUSTICE, ADMINISTRATION OF; PROFESSIONS; PROFESSIONAL ETHICS; FEE SPLITTING; CONTINGENT FEE; LEGAL AID; PUBLIC DEFENDER; DOMESTIC RELATIONS COURTS; ARBITRATION, COMMERCIAL; JUDICIAL PROCESS; JURISPRUDENCE.

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LEGAL TENDER. See MONEY.

LEGIEN, CARL (1861-1920), German labor leader. Legien was a woodworker during his youth and at an early age became an outstanding figure in the socialist trade union movement in Hamburg, rising gradually to national prominence as an organizer and leader. After the abrogation of the antisocialist laws Legien was instrumental in the organization in 1890 of the Generalkommission der Gewerkschaften Deutschlands, which sought to unify and direct the "free" unions sympathetic to socialism; he was president of the commission and of the Allgemeiner Deutscher Gewerkschaftsbund, into which the former was transformed in 1919. An organizer of unusual ability, he contributed enormously to the growth of the trade unions and acquired increasing influence as their leader. In 1902 an international trade union conference met under Legien's guidance and prepared the ground for the organization in 1903 of an International Secretariat (since 1913 the International Federation of Trade Unions) with Legien as

secretary. Legien questioned the possibility of effective trade union action on an international scale and therefore did not play a very active role as international secretary.

Legien's conception of the task of the trade unions was that they should improve as much as possible within the capitalist system the living conditions of the workers and increase the general influence of the working class by "practical" and "positive" work; he condemned revolutionary proposals as "revolutionary phrases" and opposed the general strike for political purposes. He believed in the gradual but irresistible development from the absolute to the parliamentary monarchy and then to the democratic republic; and as a parallel process he saw the absolute power of the employers supplanted by the "constitutional factory," in which workers would have "voting" rights with employers, and finally by the "socialist factory." Legien was a revisionist socialist, but his revisionism bore a strictly trade union character; it not only expressed growing opposition to revolutionary ideas but also facilitated the increasing autonomy and power of the trade unions within the Social Democratic party. With the growth of Legien's authority his influence on the party became greater, although he was not a party official.

Upon the outbreak of the World War Legien insisted that since the Socialist International had proved too weak to prevent war, the trade unions must rally to the defense of the nation and by practical work try to minimize the workers' sufferings. His efforts to maintain the International Federation of Trade Unions as a functioning organization were considered by Allied trade unionists as a move to promote Germany's cause. He opposed all revolutionary opposition and struggle and was wholly with the majority socialists in accepting the *Burgfrieden* and its implications. After the revolution in 1918 Legien opposed all efforts for a proletarian revolution and as head of the German trade unions concluded with the employers an agreement for labor-capital cooperation, in which he saw a great step toward industrial democracy. During the Kapp Putsch in 1920, when a group of militarists seized power in Berlin, Legien issued a call for a general strike, which virtually assured the defeat of the uprising; but his efforts to build upon this victory and establish a workers' government failed completely.

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LEGISLATION. While in all modern states legislation tends to assume similar forms and to perform similar functions, the American legal structure differs from that of continental Europe in two notable respects. In the first place, the common law, which is the heritage of most English speaking jurisdictions, is still to a great extent unwritten law, so that much of the administration of justice lacks the guidance of legislation, whereas on the continent legislation purports to cover the entire field of ordinary civil and criminal justice. In the second place, in all continental countries the executive government outside the field of justice has because of the existence or tradition of monarchical power a basis of common or unwritten law which is lacking in the American system. In this latter respect the English differs from the American and ranks with the continental system. The course of development during the nineteenth century has been to reduce this difference. In Europe the former field of inherent executive power has been steadily encroached upon by legislative regulation and delegation, leaving only small remnants of non-delegated power. And in both England and America considerable portions of the law relating to justice have been reformed or supplemented by statutes, and smaller portions have been codified. This is particularly true with regard to criminal law and procedure while the substantive private law in most common law jurisdictions has remained predominantly unwritten.

The difference indicated has its bearing on prevailing views of law and jurisprudence. University law schools, which largely control these views, center their attention upon the needs of future practitioners, and the main preoccupation and concern of the practising lawyer is civil and criminal justice. In America the study of the law means therefore mainly, if not exclusively, the study of judicial decisions, while on the continent it means the study of codes and statutes. The statute book is apt to be relatively as unfamiliar to the American student as judicial

decisions are to the student in civil law jurisdictions.

The American attitude finds some justification in the fact that if the portions that deal with civil or criminal justice are eliminated from a given statute book, much of what remains may properly be considered as not of special concern to the lawyer. So far as statutes give authority and direction for carrying on the complex business of government, they constitute law in the sense that law may be identified with the orderly adjustment of human affairs; but the foundation of experience and information underlying most statutory provisions is primarily political, social, economic, financial, technical or administrative, and not legal. The lawyer may well disclaim responsibility for or full understanding of these aspects of the statute book.

The specific legal interest of a statute, irrespective of its content, lies therefore precisely where the legal interest of a contract lies as distinguished from a set of specifications non-contractual in character and resting entirely upon managerial discretion. Error or deviation in the latter may be technically fatal but legally indifferent; error in the case of a contract may be a legal blunder and violation is a legal wrong. As a legal act a statute, like a contract, must be adjusted to possible controversy—it must avoid inconsistency and where it cannot avoid ambiguity the statute must accept it with open eyes.

Ambiguity whether avoidable or inevitable calls for interpretation; this is a lawyer's task and one upon which lawyers are apt to look as the specifically legal work in connection with legislation. There is perhaps some inclination to look upon the framing or drafting of a statute as a legal task mainly in so far as it anticipates and by anticipation solves problems of interpretation. From that point of view drafting is largely controlled by judicial decisions, but greater familiarity with drafting problems will disclose the inadequacy of mere subservency to judicial decisions. Risks of interpretation will have to be accepted or expedients discovered which will avoid or minimize such risks; and situations will have to be foreseen and dealt with which will make or mar the success of the statute before it ever comes into court. Skilled performance of this kind is likely to be of greater importance than adequate adjustment to judicial interpretation and constitutes an essential phase of the science of legislation. If it is not fully recognized as such, while statutory interpretation is con-

ceded a place in jurisprudence, the reason lies in the fact that supposed rules and principles of interpretation are discursively discussed in thousands of cases, whereas the thought that goes into drafting ordinarily leaves no memorial other than the letter of the statute; and while this statute commonly enough becomes a precedent for other statutes, the underlying legal principle fails to receive explicit or discursive statement.

In the modern state the function of legislation is so organized that the making of a statute requires the action of politically constituted assemblies which in the final enactment of the statute appear as consenting authorities or as representatives of the sovereign people. The political character of these bodies manifests itself in a number of features: their membership rests entirely or in part upon a representative and elective basis; the position of legislator is non-professional and compatible with the carrying on of other vocations; selection is on the basis of party affiliation or allegiance; the membership is sufficiently large to produce to some extent a "crowd psychology" susceptible to appeals to sentiment instead of to reason; there is need of group organization and incidental subordination to leadership; there is professed adhesion to policies and advance pledges to the support of specific measures are legitimate; the business of legislation is dramatized by the fact that it is confined to stated sessions and that the various measures must compete with each other for enactment.

The process of legislation is likewise such as to give play to other than legalistic or rationalistic factors: the actual sponsorship as distinguished from the formal introduction of a measure may be obscure, and a definite allocation of responsibility for the details of phrasing is frequently impossible; there is no right to a hearing for adverse interests, and while in practise such facilities are freely offered they are confined to the committee stages of a bill; the open debate while the measure is considered by the body vested with final authority is dominated by the "political" atmosphere and rarely permits of adequate attention to legal merits; the final vote is rarely influenced by the debate, being commonly a matter of foregone conclusion and not infrequently a matter of bargaining; there is absolutely no legal responsibility for final action; and although the requirement of a record vote is intended to insure political responsibility, there exist parliamentary tricks for the avoidance of a

record vote and many ways of preventing a measure from reaching an advanced or final stage without assuming responsibility for such frustration. It is necessary only to compare with the features thus outlined the constitution of a court and the methods of judicial procedure to realize the extent to which legislation is affected by political factors.

The political character of legislation must be constantly borne in mind in judging statute law. Thus juristic imperfections not only are explained but appear as inevitable. The choice between the second best and nothing at all is the normal situation. The phrasing of a statute has its ultimate test in administrative or judicial interpretation, the expectation of which (particularly of the latter) stamps upon it its legal character; but the draftsman must be aware that his success from the point of view of subsequent interpretation counts for nothing unless he can first win the approval of the legislature. As Sir Courtenay Ilbert has said (*Legislative Methods and Forms*, p. 230): "Compromise and cooperation are admirable things in politics, but they do not always tend to clearness or accuracy of style, logical arrangement, or consistency, in literary composition."

Legislation moreover is a political act in that it rests upon the voluntary choice of the legislature. It is true that under democratic government public opinion may tend to force consideration of certain matters by the legislature, but considerable scope is nevertheless left the legislature as to the time, extent and details of action. Judge made law, on the other hand, is the by-product of litigation, so that the tackling and settling of a legal problem become an inescapable duty. The distinction manifests itself in a difference of form. A court is compelled to render a decision supported by reason and principle, and it does this and no more. An appellate court accompanies the decision by an opinion phrased in argumentative and discursive language, but it need not formulate an explicit rule, and if occasionally and gratuitously it does so the formulation is not authoritative and may be subsequently qualified and "distinguished." The legislature, on the other hand, must articulate an authentic rule which is literally binding. If the formulation of such a rule appears to be politically inexpedient, the legislature will leave the matter alone; political expediency will also determine the scope of the measure. But to the extent that the measure is taken up and placed upon the statute book, it becomes a political

achievement or a political commitment as the case may be.

In a more subtle and intangible way, finally, the political aspect of legislation manifests itself in its moral force and operation. Established custom may in this respect be equal or superior to legislation; but judge made law seems to lack this character. The "sanctity of law" belongs to a statute by virtue of its being a statute, and a special kind of deference is accorded to it which a merely administrative act does not command. The appeal and impression made by legislation also express themselves in its stability. Statutes are frequently amended and in the process of amendment or revision an earlier act is commonly repealed; but outright repeal of statutes is relatively rare and is likely to be of political significance.

Since American doctrines of constitutional law are almost entirely based on judicial decisions, they fail to emphasize principles and relations which lie at the threshold of legislative consideration and which consequently determine the source and structure of written law without giving rise to litigation.

In probably every country local authorities are vested with delegated and subordinate powers of legislation; but in any consideration of the legal system of the country the rules emanating from these authorities play a very negligible part. In federal states, such as the United States, Germany, Canada and Australia, there is a further distribution of legislative power between the nation and the member states, which has a very much more marked effect upon the legal system. The difference, on the one hand, between state and local government and, on the other, between state and national government is due to the place assigned in the respective schemes of distribution to the power to make rules falling within the general province of justice.

It is the universal practise to withhold from the local legislative power the entire fields of private law, the law of the more serious offenses, and procedure, leaving it the two important fields of police regulation and of governmental services of various kinds (public improvements, institutions, aid and relief) with subsidiary powers of organization and raising revenue. The extent and manner of delegation in these fields vary considerably in the different countries, particularly as regards the establishment of local undertakings and services; the English and American method of enumerated powers stands

in contrast to the German system of a power of disposition over communal resources coextensive with local interests. Even under a system of enumeration the police and welfare powers of cities are sufficiently broad to give them considerable scope in the establishment and development of social policies. From the legal point of view, however, it is to be noted that all legal powers must be exercised in subordination to principles of law and justice over which local governments have no control, so that the incidents of property and contract, rules of liability, principles of enforcement and the interpretation of by-laws or ordinances are matters of state and not of local law.

The distribution of legislative powers between national (federal) and member-state governments varies too much to admit of a unified statement. Under the American federal constitution the residuary legislative power belongs to the member states, while the powers of Congress are enumerated. The enumeration of federal powers does not include (as it does in Germany) the general field of civil and criminal justice and procedure, which is left to the states. The most conspicuous subject of federal regulation is interstate and foreign commerce, a field sufficiently wide to admit of the exercise of a comprehensive federal police power. Apart from this the most important power is that to collect taxes to provide for the general welfare of the United States. It was at one time believed that Congress could make the taxing power a vehicle of regulation, by making the tax burden or its remission operate by way of controlling interests not otherwise subjected to Congress, but the Supreme Court rejected or greatly narrowed that doctrine in the Child Labor Tax case [*Bailey v. Drexel Furniture Co.*, 259 U. S. 20 (1922)]. There is no limit, however, to the power of Congress to collect taxes, the proceeds to be available for the promotion of the national welfare. The taxing power is as wide as the power of appropriation, and all governmental purposes that depend merely upon the use of funds are as fully attainable by Congress as by any other sovereign legislative body. Dividing all government into service and control the constitution has to be scrutinized when legislation is to operate by way of control, but it places no obstacle in the way of the creation of services.

Legislation concerns itself with the general field of justice, civil or criminal, in three ways: it secures private rights by form requirements or administrative facilities; it removes disabilities

and otherwise brings the law into accord with changed ideas of justice (law reform); or it clarifies existing law by statutory formulation (codification). The three categories are not sharply distinguished; thus incorporation and registration facilities fall under both the first and the second category; the first statute of wills (1540) was law reform, while the Statute of Frauds imposed form requirements; codification is nearly always combined with some reform. Perhaps the most notable instance of law reform in the nineteenth century was the legislation regarding the property of married women which removed the disability of coverture. Without the aid of legislation courts of equity had already given a considerable degree of protection to the property rights of married women. This branch of the law illustrates the imperfections both of judge made laws and of piecemeal legislation. The history of the Roman and English laws is characterized by the marked reluctance of the legislature to meddle with established principles of law and justice. A greater freedom in that respect was manifested in the American colonies and states. Legislative conservatism in matters of the law of persons and property is still a dominant note in both England and America; but in view of recent reforms in England in such matters as descent, illegitimacy and adoption it is difficult to base a judgment upon the earlier history of the law. In the matter of codification a difference may be observed between criminal law, procedure and private law. All American states have criminal codes; and while there is no formal criminal code in England, all the more important offenses are covered by statutes and there is no longer any disposition to rely upon the unwritten law for the punishment of crime. As regards procedure the states of the United States are divided between common law and code jurisdictions; England has no formal code of procedure. A few American states have civil codes, which were enacted in the third quarter of the nineteenth century. The movement toward general civil codification has made very little progress since that time. The great modern civil codes have all been works of law modernization (oriental countries) or of national unification (France, Germany, Switzerland), a motive which is absent in both England, where unity exists, and the United States, where there is no power to unify. Skepticism still prevails as to whether apart from these objects the gain from codification balances its difficulties and disadvantages.

The term *regulative*, or *regulatory*, legislation is commonly used to designate a distinct species of legislation. The differentiation is based upon a somewhat inarticulate recognition of the fact that regulation transcends the bounds of necessary law. The underlying thought may be expressed in this way: human relations involve the possibility of controversy concerning reciprocal rights and obligations and concerning the line between permissible conduct and punishable or remediable wrong. The peaceful settlement of these controversies calls for the impartial arbitration of some authority, and the province of these arbitrations constitutes the province of necessary law. Rights, however, involve managing and disposing powers of varying scope, and reciprocal relations involve the possibility of contractual adjustment. From this results a province of freedom within the law. Considerations of policy may lead the state to restrict this freedom and to subject it to conventional rules. Where the state instead of dealing with private rights deals with official powers of its own creation it may recognize, in analogy to the freedom of private management and contract, the freedom of official discretion or, on the other hand, it may bind official action by conventional rules. Since these conventional rules impinge upon a possible legitimate freedom of private or of official action, they may be regarded as *adventitious* (not inescapable) law, and it is convenient and appropriate to speak of this type of law as *regulation*.

There is a constant endeavor to raise by force of law the standard of social performance above the mere avoidance of acts which are commonly stigmatized as crimes or wrongs. Perhaps the line of least resistance is to prohibit and penalize practices hitherto tolerated or practices of uncertain common law status by reference to terms that carry the association of wrong and reprobation: fraudulent, unfair, excessive, unreasonable, injurious or unlawful. The terms chosen create the impression that legitimate liberty is left untouched. Experience, however, demonstrates the difficulty of thus marking off conduct which ought to be punished from conduct which serves legitimate interests or from conduct within the limits of social tolerance or license and throws some doubt upon the wisdom of extending the criminal law in this way. The difficulty is to some extent obviated by creating administrative powers to deal with particular cases by license or order, thus converting direct prohibition into deferred and individualized regulation. Admin-

istrative discretion is relied upon to temper the hazard inherent in sweeping terms and to reconcile conflicting public and private interests. In American legislation this phase of regulation is illustrated by comparing the Sherman Anti-Trust Act with the Federal Trade Commission Act.

Leaving aside the type of legislation (represented by the antitrust laws in the United States) which attempts to control by denouncing a possibly legitimate practise as a species of wrongdoing or delinquency, regulation may proceed by prescribing either the substance or the form of conduct, the former affecting ultimate objects or processes, the latter, minor or secondary detail not supposed to involve a sacrifice of vital interests. The substance of business is controlled by rules relating to qualification, scope of permitted activities, finance, labor relations, service or product, profit or return, while formal requirements relate to publicity, organization or procedure.

The line of division is not rigid. Not only may adverse or odious publicity amount to virtual prohibition, as in the former laws requiring that oleomargarine be colored pink, but it may justly be contended that apparently formal criteria or arrangements will practically force conformity to standards or will at least determine impressions received by others and thus affect marketability and value. Compulsory methods of accountancy, classification or grading illustrate this relation.

Even where the reaction of form upon substance is not equally close there will always be the legitimate expectation of some degree of influence which may lead the legislature to be content with formal requirements. They are more easily enforced and avoid the inherent difficulty of standardizing ultimate processes, a standardization which may also appear incompatible with the fullest and freest development of the social and economic forces of the community. It is the identification of this freedom with due process which accounts for doctrines of constitutional limitation that have been developed by American courts.

If direct substantive regulation is deemed desirable and practical, its details are generally a matter of expert or technical adjustment of means to ends and not primarily of legal interest. The legislature may mark its sense of detachment by delegating this detail to bureaucratic or non-political authorities, particularly where physical safety is the object to be achieved. If the

legislature keeps such details in its own hands, this is often due to the fact that controversial issues or class interests are involved (Coal Mines Hours of Labor Act of 1908; La Follette Seamen's Act of 1915).

The legitimate or practicable province of substantive regulation constitutes a fruitful but relatively unexplored field in the study of legislation. For reasons indicated this type of regulation is conspicuous in labor legislation; it also dominates American immigration legislation. It plays a minor part, however, in other important acts of Congress. The Sherman law confines itself to generic denunciation; the Federal Trade Commission law is a measure exclusively of deferred regulation; and there is in the Interstate Commerce Act a vast preponderance of delegation and formal requirement over substantive provisions, which are honeycombed with dispensing powers. It may well be that this reluctance to prescribe ultimate standards is more significant than judicial theories of constitutional power.

The philosophy of regulation of official powers assumes a distinctive aspect, if non-regulation means official discretion instead of individual liberty. The exercise of official power is regulated either in the interest of private right or in the public interest. If the former, the sanctions of observance are in a sense automatic, for if a regulation is mandatory, advantage may be taken of its neglect by treating the official act as void, and an assertive adverse interest may be expected to see to it that this result follows. Since, however, the creation of the power itself (as distinguished from its regulation) must have been intended to serve some public interest, that interest will suffer from the nullity of the act unless the loss can be made to fall on other private parties, as in the case of invalid bond issues. Non-observance cannot be effectually prevented by penalties since it is apt to be a matter not of wilful neglect but of inadvertence or ignorance. An excess of regulation may therefore sacrifice public to private interest. American legislation exhibits the anomaly of a multiplication of safeguards in the very cases in which the risk of failure from inexperience is greatest—in the grant of powers to local self-governing authorities; and the record of judicial nullification of public acts compares unfavorably with the almost entire absence of litigation where analogous powers are directed by unregulated bureaucratic action.

If regulation is imposed in the public interest,

the check of an assertive adverse interest is absent, and non-observance will not entail invalidation of the official act unless a special machinery is created for the purpose. This is illustrated by the operation of the naturalization law before and after the organization of the Naturalization Bureau. It is possible to divide and adjust administrative functions so as to subject official action to practically effective checks operating within the organization, and considerable legislative effort is devoted to this end. Such effort is aided by habits and traditions of official regularity, by the absence of the ordinary inducements to violation which operate where the freedom of private conduct is interfered with, and by the fact that official misfeasance if it does not amount to crime can be dealt with by administrative remedies. The elaborate machinery of penal enforcement which is called for in a statute regulating private rights has therefore no place in one which deals with the regulation of official powers; on the other hand, this regulation is apt to manifest a tendency to multiply formal requirements.

If official power serves as an instrument for controlling private conduct, regulation which checks its exercise may be looked upon as a safeguard of individual liberty. Again, if official power is an instrument of governmental service and that service directly affects private property interests, specific regulation is equivalent to enforceable private right. In the carrying on of those governmental services, however, which do not involve normal private rights, an excess of regulation may have the same disadvantage as excessive regulation of private conduct—it may purchase regularity at the cost of initiative and effectiveness.

If the governmental service is one that calls for development and progress, official discretion is the equivalent of individual liberty; and it may be as legitimate to recognize it in the organization of the service for this purpose as to set up detailed regulations for functions of routine and of conservation.

The choice between discretion and regulation is a matter of policy to be determined from case to case. To the student of legislation and to the legislative draftsman the choice is of importance, inasmuch as the vesting of discretion can be accomplished by simple forms of expression. Specific regulation may involve an elaborate technique, but the technique is a matter of legislative science only in so far as the choice of terms should avoid undue rigidity and obvious diffi-

culties of interpretation; otherwise the details of the regulation of official powers belong to administrative science.

In one respect the regulation of administrative powers presents legislatively a more favorable situation than the regulation of private rights. The subject matter of the regulation is apt to fall under a limited number of definite types. This permits comprehensive legislation to be made available after the manner of codes of procedure; the German Voluntary Jurisdiction Act and the Prussian General Administrative Act are instances in point. Or long experience in some branch of administration may produce model statutes capable of serving as precedents by analogy; such are the English and Scottish local government acts. It would be difficult to point to acts of Congress similarly available as models.

The difference between standardized and unstandardized legislation is illustrated where civil and criminal procedure are codified, while the exercise of administrative powers is prescribed by provisions scattered through a large number of statutes creating these powers. Codes standardize the law controlling patterns of adverse human relations which are in a sense universal and permanent, and juristic formulations made two thousand years ago in some respects retain their value and validity to the present day. Such degree of standardization is impossible where legal relations are strongly bound up with interests that do not represent universal human types. Hence civil codes do not render superfluous more specialized statutes dealing with social or economic needs. Distinctive provision is thus in part inevitable; for the rest, however, it is simply the result of habit or of the lack of comprehensive legislative planning. The prevailing legislative inertia in that respect can be well understood if account is taken of the technical difficulties of a change and the relatively slight inconvenience of needlessly diversified regulation. Perfectly standardized legislation is a counsel of perfection.

There is special legislation in a more restricted sense if a statute undertakes to deal with a concrete or specific situation. The criteria that mark off special from general acts are fluid. Examples of different types of special acts are: an act granting a pension to a named individual; an act granting compensation for quarantine destruction in a special district; the authorization of a public undertaking or improvement; and the grant of a charter to a city. The difference be-

tween special and general laws or between private and public laws is recognized by many legislatures in the provisions for printing and publication, but the lines are differently drawn and there are many special acts which are at the same time public.

The practise of special legislation in the restricted sense presents a problem of considerable difficulty. While individual legislators have a personal interest in its continuance by reason of the service it enables them to render to constituents, parliamentary leaders realize its disturbing effect upon the conduct of more legitimate business. In England, where to a much greater extent than in the United States the legislature has kept in its own hand the grant of public utility franchises, there has been developed under the standing orders of the two houses a highly standardized "private" bill procedure, intended to remove this legislation from political influence and to invest it with the guaranties of impartiality. Such provisions, however, raise the question of the desirability of absolute delegation of these matters to administrative disposition.

In the United States, Congress has in recent years undertaken to standardize the legislative authorization of river and harbor works and of public buildings. This legislation although special was always treated as public. The practise of private relief bills remains, and nothing like the private bill procedure of the British Parliament has been developed. In the states special legislation developed considerable abuses. In some states it assumed the function of a supreme equitable relief, where private error or the state of the law produced individual hardship. The more questionable of these forms of legislative interposition gradually disappeared, were declared unconstitutional or were forbidden by the constitutions. Most constitutions now prohibit legislative divorces, and a number prohibit special corporate charters. In some states the constitution specifies a list of subjects upon which there may not be special or local laws; the list covers most of the field in which the former practise had been found to be abusive or undesirable. The pressure for special legislation then manifested itself in circumventing devices, and, with regard to local acts in particular, courts have found it necessary or desirable to support narrow classification amounting in substance to special selection. This experience indicates that special legislation may occasionally serve legitimate purposes, and that its absolute pro-

hibition through constitutional provision may be unwise.

Legislative procedure is determined partly by constitutional requirements and partly by rules which each house of the legislature makes for itself. The constitutional requirements are more explicit in state constitutions than in the federal constitution. Violation of these requirements invalidates the statute if it can be proved; but journal entries and certification by presiding officers may cover up non-compliance. House rules have no extraneous sanction. Parliamentary procedure constitutes an elaborate body of law over which the courts normally do not exercise any control.

The only style requirement which is quite general in the United States is that which prescribes an enacting clause. A number of state constitutions in addition have provisions concerning title of acts, form of amending acts and unity of subject matter. Since compliance or non-compliance appears upon the face of the statute it is subject to judicial control, raising technical grounds for invalidation of statutes, which make an undesirable feature of American constitutional law. The rules are well intentioned and admirable as non-mandatory principles, but they do not lend themselves well to strict legalistic application.

Otherwise legislative style is a matter of custom and tradition. In America bills are commonly prepared by members of the legislature, while in Europe they are submitted as a rule by the government and are prepared by the administrative departments; there is only a beginning of a development in that direction in America. American legislatures, however, rely increasingly upon the aid of bureaus created by them. At first designed to furnish information and therefore attached to state libraries as legislative reference bureaus, they have tended to expand into drafting services. Congress has recognized the value of such service by establishing legislative counsels for the House and for the Senate; in England the parliamentary counsel to the Treasury has performed a similar function since 1869. The placing of the preparation of bills upon a professional basis is an important step in the evolution of a scientific technique of legislation.

In France, Germany and many other states of continental Europe statutes become operative by publication in official journals or gazettes; this practise results automatically in what becomes by compilation the equivalent of a statute book.

A few American states likewise make the taking effect of a statute dependent upon its publication through some designated channel, but in most states and also in England this is not the case. Nevertheless, in England as well as in the United States statutes are regularly printed by official authority, and volumes of session laws are published annually or biennially. In England this practise is confined to public acts; in the United States it extends to all acts. Practically everywhere statutes in which the public is interested are thus made generally accessible, whereas administrative regulations and sometimes even local ordinances are obtained only with difficulty.

The statute law in force at any given date can be gathered from an examination of all the session laws thus published. This is a time consuming and difficult process, however, since the effect of later upon earlier statutes must be considered, and in course of time the accumulation of material becomes bewildering, particularly in the absence of adequate indexing. The exigencies of public administration and of legal practise demand collections or compilations of statutes for ready reference. In all European countries this need is filled by private enterprise, and if the work is reliably done (and rival collections may constitute reciprocal checks) the lack of authenticity counts for little as against general acceptance. In the United States the practise, going back to colonial times, of occasional or periodical revision by authority of the legislature is employed by both federal and state governments. The United States Revised Statutes of 1874 are a typical example of this method of revision.

A distinction should be made between enacted and merely authorized revisions. A revision may be enacted either directly, the entire body of statute law in its revised form being treated as one or more bills, and put through the regular stages (as the Revised Statutes of the United States, New York, Massachusetts, Illinois); or by "incorporation by reference," a brief statute being passed which gives statutory effect to the appropriately described and identified revision prepared by revisers acting under legislative mandate (as in Georgia in 1895, *Laws, 1895*, p. 98). A revision is merely authorized where the legislature orders the work done by designated commissioners and provides that upon prescribed examination and certification it shall be accepted by the courts as presumptively correct; if error can be shown, however, the non-

revised authentic statute law prevails (as in Alabama and Kansas and in the edition of 1878 of the United States Revised Statutes). From the legislative point of view the authorized revision is less of a commitment than the enacted revision, and it is significant that Congress has so far refused to give full authenticity to the United States Code of 1926. An enacted revision must see to it that its repealing provisions are not inadvertently excessive, but probably any conceivable formula must leave something to judicial construction. In the course of time an enacted revision will be overlaid with new legislation, and until a new revision is made, private enterprise must keep the compilation up to date. Thus in Illinois the last official revision was made in 1874, and what now goes under the name of Revised Statutes is predominantly private revision. This difficulty is avoided by the Wisconsin plan of having an official reviser, who biennially fits the new enactments into the official revision.

In some states revisions are designated as codes. There is historical warrant for this in the fact that Justinian's code (as distinguished from the Digest) was a statutory revision. However, the term code is now more commonly applied to the systematic formulation of one of the recognized divisions of law through statutory enactment, and such a code or codes will then be only the smaller portion of the entire body of statute law.

ERNST FREUND

See: LEGISLATIVE ASSEMBLIES; INITIATIVE AND REFERENCE; LAW; JUDICIAL PROCESS; JUDICIAL REVIEW; CODIFICATION; PROCEDURE, PARLIAMENTARY; COMMITTEES, LEGISLATIVE; FEDERATION; DELEGATION OF POWERS; BY-LAW.

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LEGISLATIVE ASSEMBLIES

HISTORY AND THEORY.....	W. J. SHEPARD
UNITED STATES	
<i>Congress</i>	LINDSAY ROGERS
<i>State Legislatures</i>	ARTHUR N. HOLCOMBE
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SWITZERLAND.....	W. E. RAPPARD
THE NETHERLANDS.....	A. C. JOSEPHUS JITTA
SCANDINAVIAN STATES AND FINLAND.....	HERBERT TINGSTEN
HUNGARY.....	ROBERT BRAUN
SPAIN AND PORTUGAL.....	JOSÉ OTS Y CAPDEQUI
JAPAN.....	YUSUKE TSURUMI

HISTORY AND THEORY. The history of social institutions discloses a gradual evolution from the undifferentiated primitive type with its wide variety of functions toward the ever increasing specialization which is characteristic of modern institutions. At first there was no distinction between the areas of government, economics and religion, and even with the appearance of definite political institutions the functions which they performed were so generalized that they cannot be described as legislative, executive or judicial.

Among all the primitive peoples of the West there seems to have been some kind of popular assembly which shared with the tribal chief or king and with a council of lesser chieftains the powers of social control. These primitive European assemblies were composed of all the free-men of the tribe or, as the tribes were integrated into larger units, of the citizenry of the nation. Measures were proposed by chiefs or nobles, perhaps after previous discussion in a council of chiefs. The assembly itself possessed no initiative. Generally discussion was limited to the chiefs or at most to the older and more important members. Decisions were reached by acclamation, the clash of weapons or some similar demonstration. The body was convoked primarily for the purpose of hearing announcements of decisions already reached by the chiefs and to secure the cooperation of the people. The assembly was in no sense the supreme legislative authority. Law was customary and supposed to be unchangeable; it was endowed with the sanctity of divine origin. The political organization of the Greek community of Homeric times was largely similar to that described. The Homeric king could disregard the expressed wishes of the assembly, particularly if he was supported by the chiefs, but this was always hazardous. The

possibility of his overthrow through revolution was the one effective check on his despotic power.

As the Greek city-state developed, a more clearly defined constitutional structure emerged. Government was at times oligarchic, at times democratic. The political institutions were substantially the same in most of the democratic city-states. There was generally an assembly, called the *ecclesia*, in some instances composed of the privileged, or aristocratic, class; in others, as in Athens at the time of Pericles, of the entire body of citizens. It was a system of direct democracy. The *Ecclesia* in Athens exercised supreme authority in foreign policy, the highest judicial power, appointed and supervised the magistrates and exercised in fact the power of making laws. All proposals were prepared and submitted to the assembly by a council known as the *Boule*, but a member of the *Ecclesia* could initiate a motion to be referred to the *Boule* for consideration. It would seem amazing that the most delicate questions of state policy—negotiations with foreign powers, the direction of armies and fleets—should depend upon the action of an assembly estimated variously at from ten to forty thousand citizens. But this was truer in theory than in fact. Actual attendance in the *Ecclesia* was of course much less. And it must be remembered that the *Boule* along with outstanding individual leaders constituted the real controlling force. It was chosen for a term of one year and was composed of 500 members; all its deliberations were devoted to the study of public questions to be submitted to the popular assembly. It issued the decrees necessary to the ordinary and routine conduct of public business; gave specific instructions to the magistrates; supervised taxation and finance, the administration of justice and the ceremonial and religious life of the state.

Approval by the Ecclesia was required for all important questions.

In Rome the earliest form of popular assembly was probably the unorganized *Contio*, in which the people came together as individuals and which was similar in character to other primitive European public meetings. In historic times there were three forms of gathering organized on different bases: the *Comitia Curiata*, an aristocratic body composed of *curiae*; the *Comitia Centuriata*, organized on a military basis of centuries; and the *Comitia Tributa*, organized by tribes. These seem to have originated in the order mentioned. In all three the people of Rome were assumed to be actually convoked. There was also the *Concilium Plebis*, or council of the plebeians, in which only the lower class was present. The functions of these different bodies varied and changed with the passage of time. The *Comitia Curiata* was the assembly of the regal period, although it lingered on for several centuries thereafter. It was convoked only at the instance of the king or interrex, and its proceedings were surrounded with religious form and ceremonial. The matters coming before it were of four general kinds: it might be called upon to elect a king; criminal cases involving the question of life or death might with the king's consent be appealed to the *Comitia* for trial; it listened to important announcements; and it decided important questions submitted to it. Although it was not vested with actual legislative power, the king might seek its approval on major issues, particularly the question of beginning an offensive war. It was particularly concerned with questions relating to the gentile organization of the state, such as the admission of a new gens into a *curia*; the restoration of civic rights to an individual; the adoption of an individual previously the head of a family into the family of another. Decisions on important questions were reached by concurrence of a majority of *curiae*; on less important matters, by the multitude as a whole. Voting in both cases appears to have been by some informal method of acclamation. During the early republic the *Comitia Centuriata* succeeded to most of the important functions of the curial assembly. It acquired a general right of legislation under certain conditions, it heard cases on appeal and it elected the higher magistrates. Its organization was definitely military in character, the people being divided into classes and each class into centuries. Voting was by centuries, a majority in each century determining its vote and a majority of

centuries determining the decision of the assembly. The *Comitia Tributa* was probably like the other popular assemblies a general meeting of the *populus romanus*, in which both patricians and plebeians participated, although some writers have identified it with the *Concilium Plebis*. It is impossible to distinguish its peculiar functions; like the other assemblies it seems to have had judicial, electoral and legislative powers. Its organization was based upon the tribal structure of Roman society, only landowners being enrolled in the tribes. All these assemblies were more or less checked and limited by the Senate, a body of 300 members in the earlier period and of 600 later. The senators were at first appointed by the king and later by the consuls; but there were definite rules of eligibility based on age, occupation, wealth and magisterial status. During the early republic the Senate gave preliminary consideration to proposals to be submitted to the *Comitia*, having in that respect much the same relation to the popular body as the Boule in Athens.

Interesting and historically important as are the political institutions of Greece and Rome, they made no significant contribution to the development of modern constitutional government. The legislative assembly of the modern state originated in the popular assemblies, the folkmoets, of the barbarian peoples who inundated Roman civilization in the third and succeeding centuries. These tribal bodies included the entire soldiery of the tribe; in effect, the nation in arms. Their actions were confined to decisions on matters of supreme importance, such as peace and war. With the integration of relatively small tribal communities into larger aggregations these assemblies disappeared or lingered on as subordinate instruments of local government, their place being taken by councils of powerful men closely associated with the king, either as his personal retainers or with the development of feudalism as subjects holding their lands directly from him. Such was the Witenagemot of the later Saxon period and the Magnum Concilium of the Norman period in England. The history of institutional development can be more clearly traced in England than upon the continent, but the course of evolution is everywhere substantially the same. It is a mistaken view that treats the history of the English Parliament as unique. With the complete feudalization of society the assembly came to reflect the stratification which this system involved. The various classes—higher nobility, lower nobility,

higher clergy, lower clergy, townsmen—found their places in a body which can best be described by the term estates general. Corporate communities such as towns and boroughs were also included. The representative principle was employed but only in relation to the class, estate or corporation; there was no conception as yet of the people or nation as a whole. The mediaeval estates general naturally divided along class or corporate lines into several separate and autonomous bodies. Generally there were three estates: nobility, clergy and townsmen; but in some instances there were four. Even within the estates there were divisions of class or status. The upper clergy were distinguished from the lower; the higher nobles from the landed gentry; or the latter, as in England, from the townsmen. That in England the landed gentry and the townsmen were united in the House of Commons—a situation out of which a bicameral system developed—was largely accidental. France preserved the three distinct estates until the revolution, and in Sweden four estates sitting separately continued until 1866. These bodies were convoked by the king primarily for the purpose of voting taxes. That “the king must live off his own” was a fundamental principle of mediaeval public law, but in emergencies, particularly in time of war, he could appeal to the estates for financial assistance. Taxation was always a voluntary “aid” or “subsidy” and was voted by the estates separately, the rates sometimes varying according to the generosity of the different bodies. The meeting of the estates was the occasion for a discussion of the affairs of the realm and for the framing of statements of grievances. Sometimes the voting of taxes was conditioned upon the redress of grievances by the king. Only gradually did a true legislative power emerge. At first proposals for reform were submitted to the king in the form of petitions, the actual formulation of the statute being left to him. In England there emerged eventually the procedure by bill which, embodying the exact terms of a legislative proposal that might not be changed, deprived the king of any discretion in the exact statement of the law. The enacting clause of a British statute today: “Be it enacted by the King’s most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons in this present Parliament assembled . . .,” harks back to a time when in theory the king made the law and the estates merely consented and approved. The estates also had judicial powers.

In the evolution of constitutional government the period of monarchical absolutism has been frequently misunderstood as an interruption in the history of the legislative assembly. It was, however, an essential stage in the development of modern constitutionalism. The great function of absolutism in England as upon the continent was to weld the various dissevered and discordant elements of feudal society into a national unity. During this period parliaments and estates general either disappeared or became subservient instruments of the royal will. The emergence of parliamentary institutions in the seventeenth and eighteenth centuries is to be explained not in terms of a revival of the stratified estates general of the Middle Ages, but essentially as modern attempts to give expression to a national will which came into existence only as the result of the centralized and unifying discipline of the absolutist period. There are, to be sure, historical connections between mediaeval estates general and modern legislative assemblies; but in character and purpose they are fundamentally different. The former were feudal, representative of class and corporate interests; the latter are national, serving the ends of unified peoples which have attained national consciousness.

The modern legislative assembly is much more than a mere lawmaking body. Much of its work is accomplished through the procedure of statute making, but in effect many so-called laws do not embody that broad rule or norm which is the essential characteristic of a true law. A primary function of all modern legislative assemblies, not to be confused with lawmaking although incidentally embodying broad legislative policies, is the control of national finances through taxation and appropriations. Another such function is administrative control. In systems of the parliamentary type, like that of England, this is evident. Through parliamentary questions and interpellations, committee investigations and reports, debate upon the budget, votes of lack of confidence and reverses of the ministry on important legislative projects the administration is subjected to a minute and constant oversight. Even in countries like the United States, where the doctrine of the separation of powers theoretically obtains, the legislative assembly performs a most important function of administrative control. The organization and procedure of legislative bodies in the United States are not well adapted to the successful performance of this function. Nevertheless, through committee hearings on appropriation bills mak-

ing provision for the various services and particularly through special investigating committees branches of the administration are from time to time subjected to supervisory control. On a few occasions cabinet members have been forced to resign as a result of congressional investigations. If the conduct of government may be looked upon as similar to the business of a great corporation, the function of the legislative assembly is analogous to that of the board of directors. John Stuart Mill thoroughly appreciated the importance of this function of administrative control and rated it as more significant than that of lawmaking. "The proper office of a representative assembly," he said, "is to watch and control the government; to throw the light of publicity on its acts; to compel a full exposition and justification of all of them which anyone considers questionable; to censure them if found condemnable, and if the men who compose the government abuse their trust, or fulfill it in a manner which conflicts with the deliberate sense of the nation, to expel them from office and either expressly or virtually appoint their successors."

Other functions which a legislative assembly performs are participation in the revision or amendment of the constitution, the fundamental law of the state; ventilation through its debates of general questions of public policy, serving thus as an organ of public opinion; acting as an executive council to assist the executive; sitting as a high court of justice in impeachment cases; and canvassing the results of elections to its own membership or in some instances to other offices. It is a general principle of public law that every legislative assembly possesses the power of canvassing the election of its members and judging with respect to their legal qualifications. The American constitutions, both federal and state, specifically confer this power upon each legislative body. The manner in which both houses of Congress and those of the state legislatures have exercised this power has frequently been criticized. Election contests are likely to be decided by a party vote regardless of the respective merits of the contestants. The Constitution of the United States permits either house of Congress to exclude a member by a two-thirds vote; but this provision has not been utilized and instead there has been an inclination to deny a seat because of excessive although legal use of money in securing the election, because the person elected is deemed not of good moral character and perhaps for other reasons. In April,

1920, the lower house of the New York legislature excluded five duly and legally elected members, who possessed all the constitutional qualifications, for the reason that they were Socialists; although they were returned to the house in a special election held in September, three of them were excluded once more. The incident constitutes a dangerous precedent in parliamentary procedure and has been generally condemned as threatening the very foundations of constitutional government. It is significant that the English House of Commons, the most powerful legislative body in the world, has transferred to an impartial tribunal its power to pass on the election and qualifications of its members. British experience has overwhelmingly justified the principle that these questions should be judicially determined.

Even in the making of laws the legislative assembly is only one of several governmental and extragovernmental agencies. In the parliamentary system all important legislation is initiated by the ministry and the legislature's function is reduced to mere acceptance, with such minor amendments as the ministry will agree to, or rejection, which is likely to entail a ministerial crisis with all its ensuing consequences. In the United States the executive has a large share in the making of laws. Through his message the president or governor can focus the attention not only of the legislative body but of the public generally upon those matters on which he believes legislation is desirable. The community looks to the executive for an effective program of legislation and holds him responsible for the translation of party platform pledges into legislative enactments. As the leader of his party he is in a position to shape and mold the course of legislation to a very large extent. The executive also possesses in the veto power a direct and effective participation in the formal as well as the actual procedure of lawmaking. The considerable use of the initiative and referendum constitutes a limitation upon the law-making function of legislative assemblies from another direction.

Modern legislatures are generally bicameral, the two houses being presumed to represent different cross sections of the general interest (see BICAMERAL SYSTEM). Upper chambers have been constituted in a great variety of ways, the underlying purpose of the various devices being to remove them from the influence of the mass of the people. Indirect election and the limitation of constituencies by qualifications of wealth,

class privilege or official position are two such devices. Upper chambers have often rested on the principle of equal representation of the constituent member states in a federation regardless of disparity of population; they have often consisted of a hereditary nobility with no elective element; or their members have been entirely or largely appointed by the executive.

The principle which has determined the composition of the lower house or of the single chamber in unicameral systems has generally and increasingly been that of election by direct, secret, equal and universal suffrage, for relatively short terms. There are two prevailing methods by which members of a popularly elected legislative body are chosen: by single member districts and by a general ticket for larger areas—what the French call *scrutin de liste*. During the Third Republic France has swung back and forth a number of times between these two systems. The single member district system is generally found in Anglo-Saxon countries. The system of the general ticket is common in western Europe, where it is frequently combined with proportional representation. Under the single member district system, when the supporters of one party are largely consolidated in one section of the country, as is the case with the Democratic "solid south" in the United States, this party, although polling an actual majority of all votes cast, may return only a minority of the representatives. The surplus votes in those constituencies which are overwhelmingly of one political faith are in effect wasted. The single member district system is the basis of gerrymandering, of so constructing electoral districts as to give an unfair political advantage to the party which happens to be in power when the districting occurs. In the United States the virtual requirement that members of Congress and of the state legislatures be residents in the districts which they represent seriously restricts the range of choice and results in the loss to the public service of able representatives who have been defeated in their districts but who might easily be elected from other districts; in England there is no such restriction. The residence qualification tends also to localize politics, to enforce upon each representative the narrow view of the effect upon his constituency of every legislative measure instead of encouraging a national point of view.

The internal organization of modern legislative assemblies is primarily based on the committee system. Committees are used in all mod-

ern legislative assemblies and their employment has greatly increased as the volume and complexity of legislation have grown. But in governments of the parliamentary type they are merely investigatory bodies useful in relieving the house as a whole of much of the work preliminary to legislation. In the American Congress and state legislatures they actually frame the measures which are presented to the chamber, and they possess the power of determining what bills shall be considered. The real work in American legislative bodies is done in the committees, not on the floor of the house, and a member's influence and importance depend largely on his committee appointments. "Congressional government," said Woodrow Wilson, "is Committee government." In Great Britain the function of legislative control is performed by the cabinet, which from this point of view may be considered as the central and supreme committee of the House of Commons.

The marked increase during the last generation in the amount of legislation and in the complexity and technical character of the questions which arise has led to the creation of various agencies which serve as aids and auxiliaries to the legislative assembly in its work of lawmaking. The most notable of these are the legislative reference bureaus which exist in a number of the American states. These bureaus are staffed by experts highly trained in law, economics and political science. They are non-partisan. Their purpose is to make available to the members of the legislature all the facts which are relative to any question which may be the subject of legislation, and to this end they carry on constant research between the sessions. They assist the members in the actual drafting of bills, which often requires a degree of technical skill not possessed by the members themselves. Similar bureaus exist in many American cities and perform a like service in connection with municipal legislation. There are three types of such bureaus. Some are voluntary organizations maintained by private endowment; others have been established by the government itself and constitute official departments; while a third class are attached to state and other universities and enjoy a position of academic independence both from the government which they serve and the economic and business interests which private endowments might imply. In England the office of parliamentary counsel to the Treasury assists the ministry in the technical drafting of government bills but does not undertake the investi-

gatory functions of American legislative reference bureaus.

The operation of legislative assemblies depends directly upon the party system as it is organized within the chamber. This is related to the party system in the country at large, but the relation is never very close. Under no system of election is the chamber a perfect reflection of the political divisions among the voters. In Anglo-Saxon countries the two-party system tends to prevail both in the electorate and in the chamber, while in other countries numerous political groups exist, representing a wide variety of attitudes from extreme right to extreme left. The parliamentary form of government presupposes the biparty system in the chamber. It operates normally only when a majority party is in possession of the government and responsible through the cabinet for a program of legislation. The minority opposition party here performs the essential function of criticism. On the continent under the group system there is seldom a single majority party, and the government rests upon more or less temporary coalitions or blocs, which have no counterpart in the electorate at large. The fluctuating character of these coalitions constitutes an element of extreme instability. At times the House of Commons in England has been divided among three parties. As a result the government has had to secure the support of two parties, with a consequent insecurity of its position and a weakening of its program. In the United States, where responsibility for a legislative program is not centralized in a cabinet, party lines in the chamber are seldom sharply drawn. The alignments on important measures cut across party lines. There is an increasing tendency to form blocs, such as the agricultural bloc, the prohibition bloc, the World Court bloc, which have no relation to party divisions. Even such questions as the tariff have ceased to be party questions. Yet the party organization is preserved. The speaker of the House of Representatives is chosen as a party leader; the chairmen of all committees are drawn from the dominant party, which also has a majority on every committee. There is less and less correspondence between the party organization of the chamber and the work of legislation, financial provision and administrative control for which, supposedly, that organization exists.

In unitary systems of government the national legislature possesses in theory the entire law-making authority. By delegation regional and

municipal bodies may enact ordinances or by-laws within the scope of the powers delegated. In federal systems, on the other hand, the supreme legislative power under the constitution is divided between the national assembly and state legislatures. Each is supreme within its own sphere. In the United States, Congress is given by the constitution certain powers and to the states are reserved all other powers not specifically denied. Originally the municipalities derived their powers from statutes which the state legislature passed, but the tendency during the past fifty years has been to provide in the state constitutions for the adoption of "home rule" charters by the cities, which to a considerable extent give to the municipal authorities a constitutional status and enable them to escape from statutory control by the state legislature. One finds a large degree of parallelism in the organization and procedure of the state legislatures in the United States. There has been an obvious imitation of Congress. All American legislatures are bicameral; in all the upper chamber is chosen from larger districts than the lower; in all the committee system is employed in much the same way as in the national body; one discovers in all the same influence of the lobby, the same subjection to party control, the same tendency to disregard party lines on questions of vital importance.

Probably the most widely prevalent and most frequently discussed tendency in modern constitutional government is the decline of the legislative assembly and the corresponding enhancement of the position and power of the executive. This tendency is as noticeable in England and upon the continent as it is in the United States. Clearly in evidence before the World War, it has expressed itself in even more striking fashion during and since that period. The establishment of executive dictatorships in Italy, Hungary and Yugoslavia furnishes visible examples of a universal loss of confidence in this agency of government. The profound distrust with which legislative assemblies are coming to be viewed is the product of a number of causes. The highly complex and integrated character of modern economic and social organization demands a corresponding integration of legal and governmental control. The problems with which legislation has to deal are becoming more and more difficult, requiring a degree of specialized knowledge and expertness which are possessed only by permanent, administrative officials. With the extension of the scope of government

to include a wide array of public services the business of government is becoming more administrative and relatively less legislative in character. All of these factors are important, but probably the most significant cause is the increasingly unrepresentative character of legislative assemblies.

The theory underlying modern constitutional government is simple, and it was fairly adequate for the relatively simple conditions of the later eighteenth and the early nineteenth century. The basic assumption was that each individual's conduct was motivated by a rational self-interest. Government should be the expression of the collective will of the voters, who for practical purposes are equivalent to the people. The representative body ought faithfully to reflect and give expression to this general will. The enacted law was thus viewed as the formulated will of the people, and the legislative assembly was obviously the best possible instrument for giving effect to the popular will. Today every tenet of this theory of democracy is being questioned. The individual citizen responds to all sorts of motives, some of them far from rational. Legislative assemblies are seen to be conglomerate bodies representing a wide variety of social and local interests and are played upon and influenced by these interests through lobbies and other powerful extralegal organizations.

Generally untouched by the law, these lobbies exercise an influence that cannot be measured. Suspicion of devious and improper methods constantly attaches to the lobby. Occasionally an incident occurs which reveals definitely reprehensible practises. A number of states have enacted laws requiring the registration of all lobbyists and full publicity concerning their activities, but these measures have not proved very effective. On the other hand, the lobby does constitute, albeit in an unsatisfactory form, that representation of interests which legislative assemblies are charged with failing to achieve. Perhaps the solution of the problem of the lobby lies in giving it full legal recognition and incorporating it in some fashion into the actual mechanism of government.

"Nothing short of a new type of legislative body," says Professor C. G. Haines, "and a very much changed form of executive and administrative organization, with a well worked out plan of correlation between the two departments, will render modern governments competent to meet the exigencies of present political, social and economic life." A wide variety of proposals and

some actual experiments offer the student of politics material for a study of this problem. The transformation of the legislative assembly into a body more representative of the increasingly diverse interests of the political community has been sought through various plans of proportional and minority representation.

A far more fundamental reform, the system of functional representation (*q.v.*), is proposed by the guild socialists and by such students as Léon Duguit, Harold J. Laski and Sidney and Beatrice Webb. In various forms it has actually been introduced in a limited fashion in several of the revised constitutions of continental Europe. By this system the occupational or economic group instead of the territorial or geographical area is made the basic constituency for the election of members to the legislative assembly. In most of the plans proposed or in practise the body thus chosen does not completely replace the assembly elected by geographical areas. In the proposals of such writers as Laski and the Webbs the functional assembly, while not entirely replacing the existing political legislature, would also be endowed with broad powers of actually making laws in certain fields. The Soviet system in Russia undertakes a complete substitution of the functional principle of representation for that of geographical areas.

On the surface these proposals and experiments would appear to constitute a return to the mediaeval system of class and corporate representation. They are indeed in some instances connected historically with vestigial survivals of the old estates general which were to be found in certain communities down to the World War. They are, however, essentially radical departures from the system of constitutional government under which the modern national state has been organized. Should they succeed in winning a permanent and significant place in the mechanism of government, their advent will constitute a new and important stage in the evolution of legislative assemblies.

W. J. SHEPARD

UNITED STATES. *Congress*, the national legislative body, is bicameral, with a House of Representatives chosen for a two-year term on a population basis and a Senate composed of 2 senators from each of the states, elected for six years, with the terms of one third of the membership expiring biennially. This arrangement was one of the great compromises agreed to in the Philadelphia Constitutional Convention,

when the more populous colonies argued for representation in proportion to population, while the smaller ones wished to retain the equal representation provided for in the Articles of Confederation.

The Senate was given some special functions of an executive and judicial character, including confirmation of appointments, ratification of treaties and trial of impeachments. It was to have legislative power equal with that of the House of Representatives, except that bills for raising revenue must originate in the body which was closer to the people—a provision which in practise has come to mean that the enacting clause must originate in the House. The Senate can and does amend finance measures beyond all recognition. Impeachment proceedings are brought in the House of Representatives with the Senate acting as a high court to try them.

The framers of the constitution intended the House of Representatives as the more popular to be the more powerful body in the congressional system. That hope was in a measure realized so long as the number of representatives remained small. The first House had 65 representatives—one for every 30,000 inhabitants not including Indians not taxed and including slaves, five slaves counting as three free men. After each decennial census, however, with only two exceptions the House has grown in size despite the fact that the number of inhabitants per congressman has constantly increased, reaching 211,877 in 1910. No agreement on the size of the House was possible after the census of 1920, but a law passed in 1929 kept the number of representatives at the 1913 figure of 435 for apportionment under the census of 1930. As a result of shifts of population twenty-one states lost from 1 to 3 representatives and eleven states gained from 1 to 9 each. This figure 435 makes the House of Representatives smaller than the lower chamber of England, France or Germany, but as its numbers have grown its strength vis-à-vis the Senate has decreased.

As a result of the greater complexity of legislation and the unwieldy size of the House legislative committees have become more and more important. Debate on the floor is used now more and more not to influence votes but for its effect on the galleries and newspapers. Increasingly rigorous leadership has been necessary, but it has been an irresponsible leadership, which has accelerated the decline of the authority and influence of the House. The speaker unlike his British model is a party leader, sharing

his control of the House with the majority members of the rules committee, the floor leader of the majority and the steering committee. The great power of the speaker with regard to recognition of representatives and appointment of committees and its autocratic exercise by a succession of speakers led to the revolt against Speaker Cannon in 1910. Thereafter the speaker individually has not been so powerful and his former control over legislation is now held by the combined leadership of the House.

The House has also suffered somewhat because of its excessively local basis. The constitution stipulates only that a representative must be an inhabitant of the state from which he is chosen. This by a rarely broken custom has been taken to mean that a representative must be an inhabitant of the congressional district from which he is elected. In Great Britain the absence of any such constitutional or customary requirements has been a great safeguard against parochialism and has helped to keep up the level of ability in the House of Commons. The House of Representatives has suffered from the opposite tendency. The representative is too much inclined to think in terms of his own district rather than to take a national view of questions. Senators also represent their specific states, but the area of these constituencies is larger and the term of service is three times as long. Moreover a representative is elected in November and does not begin his work normally until December of the following year (there may be a special session any time after March 4) and then must stand for reelection in November of the next year. He must therefore always be building his political fences. Living in the shadow of his constituency he can never be unmindful of the repercussions which his congressional activity may have in his district.

This congressional calendar means also that the so-called short session of every Congress contains a number of "lame ducks"—representatives, that is to say, who have failed of reelection but who continue to legislate for three months. There are lame ducks in the Senate also, but the anomaly is more frequent and more bitterly complained of with regard to the House of Representatives. The House was reluctant to show any interest in reform. Five times the Senate by overwhelming majorities favored a constitutional amendment abolishing the short session of Congress, bringing a new House into session two months after election and providing for the inauguration of the president after a two

months' rather than a four months' delay. But up until 1932 the House was unwilling to abandon for a faster schedule arrangements which had been made in the days of the stagecoach, when it took weeks to reach Washington from the outlying sections of the country. In March, 1932, a resolution proposing such a constitutional amendment was finally passed by the House and submitted for ratification to the state legislatures.

These are some of the reasons why the House of Representatives has not fulfilled the hopes of the founding fathers that it would be the more powerful branch of Congress. In addition to the advantages inherent in its small membership and in the freedom of debate on which it insists the Senate has gained authority as a result of its special functions. Impeachment has been little used, but as a check on the president's appointing power and as the body associated with the president in treaty making the Senate has been far more powerful than the framers of the constitution expected it to be.

The intention of the framers to make the Senate a sort of executive council acting in rather regular collaboration with the president has failed of realization because senators and the president are party men as well as statesmen and because the Senate prefers to be a check rather than a collaborator. Separation—even antagonism—has become more and more pronounced. The Senate looks upon itself as the body which can save the country from the disasters with which it is threatened through treaties negotiated by the executive. While the Senate rarely objects to cabinet appointments, there has developed what is known as "senatorial courtesy" in cases of lesser positions. This means that the Senate recognizes the right of each of its members to approve presidential appointments from his state. The extremes to which this practise is occasionally carried serve to reduce the standing of the Senate with the country.

It is difficult to gauge "standing" or "influence." It is reasonably clear, however, that in the period immediately before the adoption of the Seventeenth Amendment—providing for the election of senators by popular vote rather than by the state legislatures—the Senate was declining rather decidedly in prestige. There were too many cases in which legislative election had been secured by improper influences. The period of popular election has been too short to warrant generalizations as to the effect of the change on the quality of the Senate and the kind of senators who have been chosen, but there is

one curious result, which is doubtless more extreme than it would have been if the original method of legislative choice had been adhered to. To a far greater degree than the House of Representatives the Senate is hospitable to insurgent causes. The longer term is an encouragement to independence, and the fact that 1 of 96 members of a legislative body which does not limit debate can always get some kind of hearing is an incitement to irregularity. For irregularity is much more dramatic than standpattism and is more easily translated into prominence.

If the Senate were recruited on the basis of population with no state having fewer than 2 senators, New York would have 270. Eighteen of the smaller commonwealths just about equal New York in population and from these small states come a number of the "insurgent" senators. The phenomenon is in some ways reminiscent of the rotten boroughs which, it was boasted, sent some of the most influential British statesmen to the House of Commons. From another angle the Senate presents the paradox of giving more adequate representation to the agricultural interests of the country than does the House of Representatives.

Insurgent senators have been prime movers in the recent increase of senatorial supervision over executive and administrative activity. This may be because of the character of the particular senators or because their constituencies have such a political complexion that they would in any event send representatives to Washington who were more or less irregular. Whatever the explanation of the leadership, the fact is that as a critic of the executive the Senate has come to play a more and more important role. A party majority cannot suffice to protect a president and his administrative officials, since freedom of debate in the Senate permits filibustering which may delay a legislative program. A small group may therefore coerce a majority into accepting its investigating program as the price of adhering to the legislative time table. The right of any senator to speak out at well nigh any time on what he conceives to be maladministration may persuade a party majority or the executive to conclude that an investigation which elicits facts is preferable to an *auto-da-fé* of innuendo and rumor.

Here also as well as in the matter of appointments senatorial courtesy is not unimportant. Certain senators may at some future day wish investigations of their own. Consequently even though they may not desire them they are in-

clined not to object to investigations demanded by their colleagues. Misused on occasion, looked upon frequently as an avenue of personal publicity for particular senators concerned only secondarily with improvements of administration, the inquisitorial power of the Senate is nevertheless of the highest importance. With the House of Representatives in bondage to its leaders, with debate there rigorously limited, the Senate is the only forum in which there can be criticism of the executive. Only through its committee investigations can the United States Congress exercise some supervision over the executive comparable to that day by day scrutiny of administrative action which must be endured by executives under a parliamentary system.

In most European systems the more popularly elected branch of the legislature is decidedly more powerful than the upper chamber. Even when both branches are elected the lower chamber is usually more influential. In the United States Congress the Senate is by all odds more influential than the House of Representatives; nor does the country manifest any desire to disturb this balance, although there is much criticism of the action (or more frequently inaction) of the Senate on treaties and of its hostility to the president. In short, the Senate because of its special executive functions, its inquisitorial activities, its coordinate legislative powers, its partial renewal and its constantly increasing corporate *amour propre* is perhaps the most powerful legislative chamber in any system of popular government.

For these reasons in part we have the phenomenon—peculiar to the United States—of men leaving cabinet posts to serve in the Senate or declining to leave the Senate for cabinet posts. Membership in the House has ceased to have the attractions which it had, say, when John Quincy Adams after serving as president was elected as a representative. One reason is that representatives do not compete for political prizes—that is, executive posts—as do members of the legislature in a parliamentary system. The rules prevent them even from achieving prominence. With only 96 senators, on the other hand, and with freedom of debate any senator can become prominent. Hence representatives are always anxious for promotion to the upper chamber, which drains the House of some of its best men.

Representatives nevertheless serve for a larger number of consecutive terms, and the turnover is not large. When the Seventieth Congress con-

vened, for example, of the 435 members of the House only 53 were novices. It frequently happens that as many as 15 state delegations—including sizable ones—are unchanged as the result of an election. In the Sixty-ninth Congress, on the other hand, one half of the senators were serving their first terms. The fact is not sufficiently realized moreover that when the House of Representatives swings from one party to another it does so because of changes in a relatively few "doubtful" districts. Dr. Paul D. Hasbrouck in *Party Government in the House of Representatives* (ch. ix) has tabulated the results of seven congressional elections from 1914 to 1926 inclusive. This period was a fluid one in American politics. For these seven elections 122 districts were always Democratic and 148 were always Republican—62 percent of the total. Hence the real struggle for the control of the House of Representatives was concentrated in barely more than one third of the congressional districts. The results of these contests determined whether the House was to be Democratic or Republican. The south is the most solid area and next comes New England. The west central, central and Pacific states shift their congressional allegiances with relative infrequency. The largest percentages of change are in the middle Atlantic, the mountain and the border states. Control of the Senate likewise passes from one party to another because of the results in doubtful states. There is a good deal of undebatable territory in senatorial elections also and the accident of whether the biennial choices of one third of the Senate occur in safely Democratic, safely Republican or doubtful states has great influence on the composition of the upper chamber. The verdict of the country may be the verdict of no more than sections of the country.

In quantity of legislation Congress probably leads all other representative assemblies. At the second session of the Seventy-first Congress (December 2, 1929, to July 3, 1930) 8223 bills and resolutions of various kinds were introduced. House committees reported 1918 items, of which 1403 were acted upon in some way. The statute book was enlarged by the addition of 518 public laws, 84 public resolutions and 281 private laws and resolutions. Congress was in session 156 days. Figures such as these grow larger and larger despite an increasing tendency to delegate legislative authority to the executive. In part the burden is much greater than it should be because of an unwillingness to permit private bill legislation and claims to be handled

by a special procedure, as is done in Great Britain. In part also, as has been said, the meager opportunities which Congress has for informing itself of and criticizing executive action mean that it attempts to make legislative restrictions on administrative discretion more and more severe.

The personnel of Congress is recruited from a rather narrow occupational basis. More than half of the senators and nearly two thirds of the representatives are lawyers. Merchants, farmers and journalists are next in order but none of these runs to more than 10 percent. In comparison with the House of Commons or the French Chamber of Deputies with their sharp class divisions the congressional situation is striking. Labor is practically unrepresented. At the other end of the scale the rentiers are few. In short, it may be said that Congress is controlled by lawyers and modest lawyers at that, for those with lucrative connections rarely try to enter Congress. As might be expected from the unreal party groupings in the United States, it is the middle class, the bourgeoisie, rather than the aristocracy, the plutocracy or the proletariat which is represented in the American legislature. Nor are there many so-called intellectuals in Congress. All of which may be said to result from the conservatism of the two major parties, the weakness of third party movements, the choice of the cabinet outside of Congress, the fact that business and the professions are a greater lure to ability than is public service, the connection of residence with representation, and the size of the country.

Of late it has become increasingly fashionable to complain of Congress and to sneer at it. One reason is the lack of responsible leadership. Another is the president's ability to command the avenues of publicity. Business in Congress is so complex and so uninteresting in its details that issues must be highly important to attract much attention. Ordinary routine is exciting to the newspapers only if it is disorderly or humorous. There is usually much bipartisan voting, with rarely a clear clash of parties. By and large, however, in contests with the president Congress is as frequently on the side later approved by the country as is the executive. In such controversies Congress frequently has a bad press, since the congressional case must be constructed from a variety of converging views which may be indifferently expressed, while the executive is able to put before the country a clear, simple case. Nevertheless, it may be said that in general

Congress adequately represents the country, that under strong presidents who furnish real leadership it is complained of less frequently than under weak presidents and that on an average its collective intelligence is not measurably inferior to the intelligence of the average president.

LINDSAY ROGERS

· **STATE LEGISLATURES.** The legislative departments of the state governments are organized and operated in accordance with the provisions of the state constitutions. In each of the forty-eight states the constitution now in force provides for a department of legislation consisting of two branches, in which the legislative power is vested. The structure of these two branches, generally called the senate and house of representatives, and the mode of electing their members are always definitely prescribed and the legislative process in each branch is more or less carefully regulated. But the meaning of the term state legislature has never been precisely defined, and the nature of the legislative power still remains to be fully explained.

There are several references to the legislatures of the states in the federal constitution. It is provided that the time, place and manner of electing United States senators and representatives shall be prescribed in each state by the legislature thereof, and in 1932 the United States Supreme Court decided that for the purposes of this provision the state legislature includes the governor in so far as his approval is required by the state constitution for the adoption of legislative enactments (*Smiley v. Holm*, 285 U. S. 355). But the approval of the governor has never been required for the ratification of amendments to the federal constitution by a state legislature, and the United States Supreme Court has decided that the state electorate is not included in the legislature in states where legislative enactments may be referred to the voters for their approval in accordance with provisions of the state constitutions. It has not yet been determined clearly what is meant by the term legislature in the provision of the federal constitution which relates to the granting of consent on behalf of a state to a division of the state or to its junction with another state, but apparently the term does not include the governor in the provision relating to applications by state legislatures for federal protection against domestic violence.

The nature of the legislative power is likewise

ill defined. The state constitutions unlike the Constitution of the United States do not undertake to enumerate all the powers which are conferred upon the legislative department of the government, nor do they attempt to define legislative power. Many powers conferred upon the legislatures are specified in the state constitutions; many others, which seem to be legislative in their nature, are specifically denied; and numerous legislative enactments are contained in the state constitutions themselves. But the nature of the power, as Jefferson suggested in his *Notes on Virginia*, must still be left to the determination of "reason"; that is, of the state and federal courts. Jefferson himself expressly denied that reason was to be governed in this matter by the precedents established in England and in the American colonies before the revolution. But colonial experience, as reflected in the prevailing notions of the American people at the time of the revolution, undoubtedly exerted a preponderant influence upon the development of the concept of legislative power. The colonial assemblies had been generally regarded as the strongest bulwarks of popular liberties, and the destruction of royal and parliamentary authority by the revolution swept away the principal barriers to the uncontrolled supremacy of the department of government in which the people reposed the greatest confidence. Despite the general adoption of constitutions in the original states, proclaiming the doctrine of the separation of powers as the foundation of the American political system, the checks which were introduced upon the authority of the legislatures were wholly inadequate, except in New York and Massachusetts, to establish an effective balance between the three governmental departments. The original state governments were mostly governments characterized by the practical supremacy of the legislatures and the constitutional predominance of the legislative power.

The subsequent constitutional history of the states has been largely the history of the introduction of further checks upon the power of the legislatures and the establishment of a more stable balance between the departments of state government. These checks have taken various forms. In the first place, the authority of the legislatures has been checked by the grant of powers to the other departments of state government. The legislative power of the executive department has been strengthened by the establishment and expansion of the gubernatorial veto, by the adoption of the executive budget

and by the development of executive leadership in state politics. The authority of the legislatures has been further curtailed by the development of the power of judicial review of legislation and by the introduction of processes for direct legislation by the people—the initiative and referendum—and for local and especially municipal home rule. The state legislatures have lost power also in consequence of the growth of federal centralization, especially through the expansion of the authority of Congress under the interstate commerce clause and of the Supreme Court under the Fourteenth Amendment. Originally the state executive and judicial officers in many states were dependent upon the legislatures for their elections and were incapable of exercising freely even the powers which were recognized as non-legislative in character, but the universal adoption of the system of direct popular election of executive officers and the general adoption of direct popular election of judges gave these departments the necessary independence for a vigorous exercise of their powers, both legislative and non-legislative. Thus the effective separation of powers called for by the original theory of state government was gradually established in practise, and a workable system of checks and balances brought into existence.

Secondly, the authority of the legislatures has been restricted by the adoption of direct constitutional limitations upon legislative powers and procedure. These limitations have grown out of the abuse of power by the state legislatures and have generally been designed to redress specific grievances. Illustrations of substantive limitations upon legislative power are the prohibitions against granting pardons or divorces by legislative act, the prohibitions against taxing property at other than uniform rates and the prohibitions against special private and local legislation where general laws of uniform application may be enacted. Procedural limitations upon legislative power have become even more important than substantive limitations. Illustrations of such limitation may be found in the requirements that a bill shall relate to but one subject, which shall be fairly described in the title; that all bills shall be read in full on three separate days in each house; that the yeas and nays shall be recorded on demand of a certain number of members; that bills shall not be introduced after a certain number of days following the opening of a legislative session nor within a certain number of days of the close of the session; that proposed amendments shall be

printed for the use of members before a final vote may be taken; that no bill shall be considered for final passage unless previously referred to a committee and reported therefrom; and above all that no person be deprived of life, liberty or property without due process of law or denied the equal protection of the laws. Furthermore the authority of the legislatures is limited indirectly by the restriction of the frequency and duration of legislative sessions. In most states regular sessions are held biennially and may extend from forty to ninety days. In a few states these limitations are supplemented by penurious restrictions upon the payment of legislators designed to discourage them from meeting for more than the prescribed minimum period.

These extensive constitutional limitations upon legislative power and procedure betray a deep and persistent distrust of the state legislatures. The principal causes of this distrust have been the predominance of personal and local interests over the general welfare in legislative deliberations, the inability of the legislatures to avoid needless extravagance and waste in the management of the state finances and their practical incapacity to protect the public interests against invasion by powerful special interests. Despite these constitutional limitations the volume of private and local legislation of a special nature continues excessive in many states and the volume of public general enactments reveals the incompetence of the legislatures to exercise effectively the powers which they have been permitted to retain. The state law index, which is prepared by the Library of Congress and contains an index and digest of the legislation of the states, shows that in the course of a typical biennium the state legislatures pass some sixteen thousand acts, filling more than twice that number of pages in the statute books. This does not include the bills passed by the legislatures but killed by executive vetoes, of which in one recent year there were more than a thousand. In addition the governors killed parts of another thousand bills without destroying the bills in their entirety. Of the bills vetoed by the governors in this year fewer than 10 percent were reenacted by the legislatures, and it is probable that this high mortality of state legislation is no more than normal. Bills are frequently vetoed, not only because they seem to the governors inexpedient but also because they are duplicates of other bills previously enacted or are defectively drawn or are

for purposes which can be properly accomplished under general laws or should be provided for, if at all, by amendments to general laws. In addition a substantial number of bills are declared unconstitutional each year by the state and federal courts, either because they exceed the powers of the state legislatures or because they have been enacted in an improper manner. A few years ago this number apparently ran nearly as high as a hundred bills per annum, including the decisions of all the state and federal courts, and it is probably higher at the present time. Finally, a number of bills are vetoed each year by the voters themselves at the polls and a number are adopted without the approval of the legislatures. It is difficult to avoid the conclusion that despite all the efforts to improve the quality of state legislation the work of the legislatures continues to be less efficient than the people have a right to demand.

Dissatisfaction with the work of the legislatures sustains the efforts of those critics of state government who urge further changes in legislative organization and procedure. At present all the states have bicameral legislatures in which the most important difference between the upper and lower houses consists of the greater number of members of the latter. The number of state senators ranges from 17 in Delaware and Nevada to 67 in Minnesota, but most of the senates have from 30 to 50 members. Most of the lower houses have from 100 to 150 members, but the number ranges from 35 in Delaware to 419 in New Hampshire. In nearly all the states the members of the lower house are elected biennially for terms of two years and in nearly two thirds of the states the senators are elected for four-year terms, half of which expire every second year. In most states the county is the unit of representation, and one or more representatives are elected from each county in accordance with their respective populations. Larger districts for the election of senators and districts for the election of representatives in states with numerous small counties are formed by the union of the counties. In some states, however, large cities may be divided into legislative districts, as for the choice of congressmen. In general the existing systems of legislative districts favor rural areas and result in considerable underrepresentation of urban populations. In some states this discrimination against urban areas deprives the majority of the people, living in the cities, of their proper influence in state government and encourages serious abuse of

power by rural minorities. In most states the temptation to form legislative districts with a view primarily to partisan or local or even personal interests has resulted in grave evils.

Legislative procedure is much less uniform than legislative organization. In all states much use is made of standing committees for the consideration of measures before their discussion by the legislative houses; but wide differences exist in the number of such committees, in the number of members of the regular committees and, most important of all, in the privileges of the committees under the regular rules of procedure. The national House of Representatives at Washington has developed rules under which the important committees when supported by the majority party are able to dominate the House and reduce the individual member, as far as public general bills are concerned, to the position of a mere cog in a machine. The power of the machine is fortified by the classification of business, the limitation of the time for debate and the effective leadership of certain members, especially the speaker, the chairman of the highly privileged Committee on Rules, the chairmen of other privileged committees and the regular floor leaders of the two great parties. In the United States Senate, on the other hand, the senators have jealously guarded their personal liberty and have consistently refused to grant special privileges to committees or to impose limitations upon the freedom of debate which would seriously restrict the independence of the individual senators. The modes of transacting business in the two branches of Congress represent the two extreme types of legislative procedure. There is no state legislative body in which the individual member is reduced to such helplessness as in the national House of Representatives and none in which he is more powerful than a United States senator. The development of rules in accordance with the practise at Washington has gone further in New York than elsewhere. At Albany an ordinary assemblyman has a little more liberty than an ordinary congressman, but a New York state senator is much less free than a senator at Washington. Although the New York senate rules like those of the federal Senate do not permit a motion for the previous question, there is provision for the closure of debate in more effective form than at Washington. In many states where the rules of procedure seem more favorable to the individual legislator the constitutional limitations on the duration of legislative sessions and the conse-

quent pressure of business, especially toward the close of a session, create the conditions under which legislative machines flourish as in New York and in the national House of Representatives.

Many different proposals have been offered for the improvement of the structure of the state legislatures and of the process of legislation. The most radical proposals have called for the abandonment of the bicameral system and the election of a single legislative body by some form of proportional representation. These proposals have been associated with general plans for the systematic reconstruction of state government, involving the reform of the executive and even judicial branches as well as the legislative. They have not yet received the serious attention of the public. Less radical proposals would equalize the representation of urban and rural areas and substitute joint standing committees of the two houses for separate committees in each house. This is the Massachusetts plan of legislative organization. Combined with the requirements that all committees hold public hearings on all bills, that all bills be reported by the committees to the legislative houses for final action and that the legislature remain in session until its business is finished this plan produces better results than the usual system of legislative organization and procedure. In Massachusetts also the registration of legislative agents and legislative counsel inaugurated methods of regulating the lobby which have been adopted in some other states. In Wisconsin pioneer work has been done in the development of legislative reference and bill drafting services, which have been widely copied with good results. In California and West Virginia experiments have been made with the so-called split session of the legislature. In these states it was provided that the legislature should sit for a limited time for the purpose of receiving bills and resolutions proposed for adoption, then adjourn in order that the public might have time to examine these proposals and express an opinion upon them and finally reassemble for further deliberation and action. Restrictions were placed upon the introduction of new measures in the second part of the split session. The experiment was soon abandoned in West Virginia, however, and seems to have accomplished little in California.

The most successful reforms in the legislative process have been those which have relieved the legislatures of duties for which they were not well suited by delegating authority to adminis-

trative agencies. The establishment of state railroad and public service commissions, for example, withdrew from the legislatures the burden of regulating in detail the rates and service of public utilities. The enactment of general corporation laws and the establishment of corporation commissions have reduced the demand for special acts of incorporation and special regulation by statute. Banking and insurance commissioners have taken over much of the responsibility for the regulation and control of those important branches of business. Civil service commissions have relieved some legislatures of a part of their former preoccupation with administrative appointments. The adoption of municipal home rule and the creation of state boards of equalization and state tax commissions have reduced the demand for legislative intervention in local affairs. In short, the most promising method of improving the legislative process has proved to be not the constitutional limitation of legislative powers and procedure but the wider utilization of administrative processes in cases where discretionary authority must be exercised in matters of technical detail. Thus the improvement of state legislation seems to be bound up with the creation of a competent and responsible administrative system. The state legislatures despite the American tradition of the separation of powers cannot be treated as independent parts of a governmental machine but must be recognized as organs of government with functions and consequently powers which are conditioned by the nature of the whole political organism.

ARTHUR N. HOLCOMBE

GREAT BRITAIN AND DOMINIONS. The British Parliament has never been a mere legislative assembly and that fact has determined its organization, power and influence. At the outset Parliament was a consultation of the mediaeval king with his tenants in chief. Administrative and judicial rather than legislative, it was composed of members who represented only their own interests and who considered this collaboration a burden rather than a privilege. In the thirteenth century, however, for the better securing of money the king summoned representatives of the new rising classes—the knights of the shire and the burgesses of the boroughs—to special meetings of his feudal council. Among the representatives comprising the so-called Model Parliament of 1295 there were also 2 archbishops, 70 abbots and other heads of religious

houses, 7 earls and 41 barons; but it is not clear, however, on what principle the selection was made. Spiritual and temporal lords received their summons by virtue of their feudal function as tenants in chief of the crown and did not constitute in the beginning a hereditary body. It was not until the end of the Middle Ages that the House of Lords clearly emerged with peers differentiated from the council on the basis of a theory of peerage. In the Parliament of Henry VII there were 49 spiritual peers and 29 lay peers. After the disappearance of the abbots with the dissolution of the monasteries the spiritual peers were reduced to 26. There were 56 temporal peers in 1597, 78 in 1604, 142 in 1661.

By the time of Edward III there was a separate House of Commons consisting of the knights of the shire, the burgesses of the boroughs and the lesser barons sitting apart for the informal discussion of the business they were formally to transact as part of the full Parliament. Of the organization of the House of Commons in the Middle Ages little is known. By the end of the fourteenth century it had secured the initiative in finance because of the inability of the king to live on the proceeds of his own feudal estates. Control over legislation was more difficult, inasmuch as the crown possessed its own prerogative powers of legislation. Although by the end of the fifteenth century all legislation was passed "with the advise and consent of the Lords Spiritual and Temporal and Commons" and although the King's Council was sometimes controlled by Parliament, the sporadic parliaments of the period were in the main devices for registering formally the exercise of feudal powers.

But by the sixteenth century the faint outlines of the future British Parliament began to be discernible. The House of Commons was mentioned in the dispatches of ambassadors as a power of importance. It kept a journal of its own proceedings. Its voice in the Parliament was no longer limited to its speaker; equality of all members before the House was firmly established as well as the method of taking a vote at the conclusion of debate. Seats in the House became valuable enough to justify bribery and election promises. Members of the King's Council and the sons of peers became members. The Tudors with a hostile peerage and the Reformation to carry through were glad to use the House as an instrument of the royal will. Although they were intensely jealous of their royal prerogatives—executive, judicial and legislative—and brooked no interference with the selection of

royal councilors they found it expedient to secure for the laws which had been drafted by the judges in council confirmation by Parliament.

As a result of the constitutional struggles of the seventeenth century it was definitely settled that sovereignty should rest with the king in Parliament and not with the king alone or with the king in council. The Revolution of 1688 secured the "freedom of men under government to have a standing rule to live by common to every one of that society and made by the legislative power erected in it" (Locke). But this civil liberty was neither religious, social, political nor economic liberty. The Revolution of 1688 was the victory of a landed aristocracy which found it convenient throughout the eighteenth century to rule through a House of Commons whose membership it largely controlled. The power of nomination to a seat in the lower House was a piece of property publicly auctioned (*see* ROTTEN BOROUGHs), and despite its glaring anachronisms the system survived, chiefly because it provided for the representation of new wealth. If Walpole and the younger Pitt went far toward teaching the House of Commons its dominant position in the state, it was not until the Reform Act of 1832 that the power of the king and the traditional ruling families was broken and the older constitutional balance between crown, Lords and Commons seriously shaken. Although the Reform Act of 1832 broke the spell of the fear of change, the extension of the franchise has been gradual. The year 1832 added 49 percent to the electorate; 1867 added 88 percent, or 900,000; 1884 added 1,800,000, or 67 percent. In 1915 there were over 8,000,000 on the register. The year 1918 added 13,000,000 new voters, including for the first time women over thirty; 1928 added over 5,000,000 new voters by extending the franchise to women of twenty-one.

In spite of these numerous modifications of the electoral system the House of Commons remained throughout the nineteenth century predominantly aristocratic in character. Since the Revolution of 1688 it had been the social center of London, and as late as 1860 it was still the custom for a great peer to devote at least one of his sons to the service of his country and the defense of his order in the House of Commons. Despite the abolition in 1838 of the property qualification for membership aristocratic control tended to persist by reason of the expense of elections and the importance of influence, corrupt or social. Bribery was not seriously

restrained by legislation until 1854 and not effectively until 1883; and the secret ballot was not adopted until 1872. In the House of Commons of 1880, 155 members were the sons or near relatives of peers. Although the extension of the franchise was accompanied by the development of party organization and the dominance of the cabinet over the House of Commons, the grip of the aristocracy on the chief political offices of the state relaxed only slightly during the nineteenth century. Before the Reform Act the king's advisers, who by the late eighteenth century had become nominally responsible to Parliament, were with few exceptions members of the House of Lords and acceptable to Parliament because acceptable to the king; and even after the introduction of a more formal cabinet technique the older tradition persisted.

The rapid decline in the power of the aristocracy in the present century may be attributed to profound changes in the character of the membership of the two houses, which in turn reflect broader transformations in the economic life of the nation. In 1837 there were 432 members of the House of Lords, in 1931 the number had risen to 731. There was a very rapid increase after 1880 when the new financial and industrial wealth joined the great landowning families in the second chamber. As a result of this rapid increase, and the conservatism of the chamber, the prestige of the House of Lords declined markedly. The decline would have been greater if five sixths of its members were not usually absentees. Since the Parliament Act of 1911 the Lords have had no power in finance and a mere suspensive veto in ordinary legislation. On the other hand, the predominantly aristocratic character of the House of Commons was basically transformed as a result of the growing ascendancy and influence of entrepreneur and labor groups within the state. In the 1924 House of Commons, for example, 25 percent of the 615 members were closely connected with industry, commerce or finance, 21 percent were practising lawyers and 14 percent were trade unionists; while an analysis of the membership of the cabinet in the twentieth century reveals that the great majority of the important administrative and executive offices are filled by bourgeois or labor members of the lower House, since it is there that the cabinet ministers must defend their policies.

The procedure of the House of Commons is the result in large part of its long struggle with the crown and with the House of Lords over

control of finances. In the sixteenth century the speaker was the intermediary between the king and the House and managed the king's business, sometimes deliberately confusing the Commons by his method of framing questions. By the device of the Committee of the Whole House, however, the Commons found a way to get him out of the chair, and by a refinement of this device in the form of a Committee of Supply and a Committee of Ways and Means was able to exert a more effective pressure in financial matters involving appropriation and taxation. To secure the complete establishment of financial control it was essential that the House of Commons should have authority over the raising and spending of all public moneys, should exclude the House of Lords and should secure effective control over the government of the day. As a result of the Revolution of 1688 the king lost control over revenue and taxation; while the House of Lords by the legislation of 1671 and 1678 had been shorn of all its powers both in initiating and in altering financial measures. When in 1909 the Lords challenged this principle by rejecting the Finance Bill of 1909 the Parliament Act was passed, under threat of the creation of sufficient peers to swamp the opposition in the Lords, "to secure the undivided authority of the House of Commons over finance, and its predominance in legislation." By this act the Lords have no power to amend or reject a bill certified by the speaker to be a money bill.

A second factor determining the procedure in the House of Commons has been the press of business in the modern state. When in the seventeenth century Parliament found itself confronted for the first time with the active responsibility for the conduct of public business it tended to shift the problem on to the shoulders of the speaker; and although in the eighteenth century the power of the speaker in determining the order of business gradually dwindled until he had become an impartial servant of the House, the procedure of the House of Commons remained essentially unchanged down to the middle of the nineteenth century, still heavily shackled with precedents from a less complex political era. During the latter half of the century, however, the determination of the Irish Nationalists under Parnell to wreck the parliamentary system, combined with the increasing pressure of public business, compelled a drastic reform—and continuous modification of House rules from 1880 to the present day. By the de-

vices of the closure, the guillotine and the "kangaroo" the cabinet, provided it has a majority to support it, can control every stage of public business and in fact now takes more than four fifths of the time of the House. Five standing committees nominated by a Committee of Selection consider the detail of the majority of bills. Only very controversial bills are considered in Committee of the Whole. The stages for a public bill are: formal first reading, general debate on the second reading, committee stage, report stage and third reading. Few bills are passed that are not either government bills or bills introduced by private members which have received the approval of the government. Private bills, that is, bills which affect a local or particular interest, are dealt with by a special procedure which assures a judicial hearing to the interests concerned.

This pressure of modern business has seriously affected the control of the House of Commons over financial measures and has eliminated all possibility of really effective control in this sphere over the government of the day. But the procedure of the House does provide that the government of the day shall have control over its own finances and that the House of Commons shall be able to detect gross extravagance or fraud. The essential principles are that no taxes are levied and no expenditure is incurred save under the authority of Parliament and that all financial business whether directed to the raising or the spending of funds is originated by the crown alone; that is, by the cabinet. The convention that the initiation of financial measures is the exclusive prerogative of the ministers insures the balancing of the annual revenue and expenditure; for the chancellor of the Exchequer, informed by the expert civil service of the estimated expenditure and the estimated revenue from proposed taxation, is in a position to co-ordinate them.

The House cooperates with the government in the discussion of expenditure and taxation through two committees of the whole House: the Committee of Supply, which authorizes yearly expenditure, and the Committee of Ways and Means, which prescribes taxation and draws up the finance bill, legalizing the collection of the necessary taxation, and the appropriations act, authorizing expenditure on certain specific purposes and those purposes only. These committees can neither review the estimates nor criticize with any effectiveness the proposed taxation, for even if they have the knowledge

they cannot be given the time. The House of Commons never reduces on financial grounds any estimates submitted to it. Since 1862 there has been a select Committee on Public Accounts and since 1866 a comptroller and auditor general, a permanent official responsible for reporting to it. This non-partisan committee of fifteen members, whose chairman is drawn from the opposition, conducts a postmortem examination into the expenditure of government departments and thus serves to secure economy in the carrying out of policies already decided upon. A small committee intended to criticize the estimates has not been a success. To be effective it would have to criticize the estimates before they were presented, and since such action would strike at the responsibility of the cabinet it has been confined to the criticism of the estimates after they have been voted.

The rules of procedure in the House—a vast and intricate body of custom law interpreted by the speaker—remain in operation even when the written law of standing orders is suspended by the vote of the House. A new speaker is chosen from the party in power, but he does not change with the government of the day and he is reelected in every Parliament until he retires, usually with a peerage. He takes no part in elections, being by agreement returned unopposed. When the House is in committee the chair is taken by the chairman or deputy chairman of Ways and Means or by one of a panel of five chosen by the speaker. Unlike the speaker these are party appointments made anew with every change of government. At the commencement of each Parliament the speaker formally claims from the crown for the Commons "their ancient and undoubted rights and privileges."

The supremacy of Parliament, the responsible cabinet and the organization of parties have grown up together. The beginning of the nineteenth century witnessed the first appearance of His Majesty's Opposition. This marks the beginning of the modern period, for while the crown was still a vital part of the working constitution opposition was hardly respectable. The most significant thing about the position of parties in relation to the House is that they have never been organized to control the constitution from outside Parliament. The extension of the suffrage in the nineteenth century compelled the great parliamentary leaders to organize party machinery, but the control of policy has remained with the parliamentary leaders and has not passed into the hands of the party organizer.

The management of parties in the House is the duty of the "whips," who are all members of the House. The government whips hold paid government office; the chief whip is parliamentary secretary to the Treasury and the others are junior lords of the Treasury. The opposition has its whips who are not salaried; these together with government whips and with the assistance of the speaker perform vital functions in the ordering of business and the staging of debates.

The world wide influence of the British Parliament has been due to the fact that it was the first machinery of government to offer a practical alternative to the rule of enlightened despots. In the seventeenth and eighteenth centuries it was the one working non-arbitrary government to which speculative political philosophers could point. They did not, however, understand its real functioning. The British Parliament like its sister institution, the common law, had at the end of the eighteenth century every defect that aristocratic self-interest and an uncritical traditionalism could produce, but it was at the same time empiric and closely related to the national life. Insularity and a comparatively early displacement of feudalism and autocracy had given the British people a distinctive unity of national life as well as political institutions and procedure admirably adapted to the growing demands of emerging democratic states on the continent and in the new colonial areas overseas. Moreover the compromise whereby eighteenth century England had been able to keep a Hanoverian on the throne—despite the fact that half the aristocracy remained loyal to an exiled Stuart—through the device of a cabinet system of government which left to the king only the paraphernalia of royalty was frequently a decisive factor in introducing the British model into European states reacting from the antimonarchical excesses of the 1848 revolutions.

The spread of British parliamentary technique to the dominions of the British Empire has raised the interesting problem as to the extent of its adaptability to the solution of the problems of a federal government, especially where geographic expanse and preoccupation with purely commercial pursuits are complicating factors. In 1867 the framers of the Canadian constitution set up a responsible cabinet with a governor general representing the crown. But the pressure of federal conditions and the influence of the United States, combined with the nationalistic problems created by the French

population in Quebec, have profoundly modified the working of the British parliamentary system. The members of the Canadian House of Commons are in the main inhabitants of their constituencies and concerned only with the advancement of local interests, while the different provinces have special claims to particular cabinet posts. The speaker, occupying a position halfway between the speaker at Washington and the speaker at Westminster, makes political addresses, distributes patronage and has accepted cabinet office. His nomination is moved by the premier supported by the party in office and he serves only during one Parliament. The office is taken alternately by a British and a French Canadian member. The leader of the opposition has since 1906 been paid a salary. Both the government and the opposition use the caucus system. Recently party conventions on the American plan have been replacing the control of the parliamentary caucus. The prime minister in forming his cabinet has to consider not merely the claims of his followers in Parliament but also the claims of those who have given party service in the provinces. Through his control of Senate appointments, provincial governorships, the judiciary and even the civil service, the prime minister or through him the party has the opportunity for machine politics on the American plan. The Senate was made a nominated chamber in which the federal principle of equal representation of the component states of the federation was only partially carried out. It consists of 96 members, the share of each province varying from 24 to 6. In case of deadlock between the two houses the government of the day can secure the creation of 4 or 8 new senators. Finance bills must originate in the House of Commons, which may be rejected but not amended by the Senate. The Senate has not achieved even the limited prestige of the House of Lords, nor is it like the American Senate the guardian of state rights. As it shares in the control of neither "pork" nor patronage and can secure no notice from the press, its function is negligible except in so far as it affords a haven for loyal party workers.

In Australia federal conditions have still further altered the British parliamentary system. At the time of federation in 1900 the smaller states feared the domination of New South Wales. Each state was given 6 representatives in the Senate. For the sake of continuity one half were to retire every three years. In order to secure members of distinction election was to

be direct in a state wide constituency. In ordinary legislation the powers of the Senate were made equal to those of the House of Representatives, while in finance a complicated scheme secured the predominance of the House of Representatives in the ordinary services of the government but safeguarded the Senate against tacking. The Senate has not developed as a revising chamber nor as a protector of state rights. The predominance of industrial issues and the rigidity of party organization have divided both the House and the Senate on the same lines. The cabinet system has secured the predominance of the lower House, where the important bills are introduced and questions answered. But the cabinet itself is elected by and responsible to the caucus composed of all the members of the party in both houses.

The quality of the membership of both houses in both the federal dominions has not attained the high level characterizing the British House of Commons. Whereas Great Britain has only to find one House of Commons from 40,000,000 people, each dominion must find several from less than one quarter that number. In Great Britain the powers of the state are concentrated in one sovereign body and not divided according to the vagaries of the judicial interpretation of a written constitution between state and federal authority. The complexity of the machinery of elections is less and the influence of the public spirited amateur in politics more marked in Great Britain than is possible where political machines have to be worked by obscure professionals on a continental scale.

New Zealand has the simplest legislative problems of all the British dominions. Annexed by Great Britain in 1840, it was given an elective legislature in 1852 and responsible government in 1856. With the disappearance of the provincial councils after 1876 the work of the central government was important enough to cause the development of a party system. In 1879 manhood suffrage and in 1893 electoral franchise for women made the constitution of New Zealand one of the most advanced democratically in the world. The House of Representatives consists of 80 members, including 4 members returned by the Maori aborigines, elected for three years. In the Legislative Council, where life appointments had hitherto been made, nomination for seven years was instituted in 1891. The Legislative Council has shown no vigor as a second chamber and exercises no influence on the life of ministries or on the political education

of the electorate. With few problems of foreign policy, no native question and no religious conflicts political life has been comparatively calm and party ties have been loose. The membership of the Parliament is not distinguished. But if politics in New Zealand is not an inspiring profession neither is it a corrupt one.

Unlike New Zealand the Irish Free State has suffered every ill to which political flesh is heir. Born of civil war the constitution drawn up by Irishmen for Irishmen is conditioned by the terms of the treaty with Great Britain. Whatever the nature and force of this agreement, the actual government of Ireland is an experiment in the most advanced form of democratic government. All powers of government and all authority, executive, legislative and judicial, are declared to be derived from the people. In its original form the constitution divided the legislative power between the people and a Parliament made up of the king and two houses. Conditions approaching those of civil war have, however, compelled substantial changes. The power of amendment given provisionally to the Parliament has been used practically to suspend the constitutional limitations on amendments. The constitution provided for the predominance of the lower house, *Dail Eireann*, over the executive. The *Dail* elects a president and then the Executive Council selected by him. The *Dail* may not be dissolved except on the advice of an Executive Council which has not ceased to be supported by a majority. An experiment to introduce in addition to the collectively responsible Executive Council the Swiss system of heads of departments individually responsible to the *Dail* has broken down. Every member of the Executive Council may address the Senate, but a senator may not be a member of the Executive Council. Money must not be voted or taxes imposed except on the recommendation of the Executive Council. The original scheme attempted to secure a Senate with a constituency distinct from the *Dail* yet with adequate authority, and with functions appropriate to a second chamber. It was to be elected by the whole country, voting as a single constituency by proportional representation, from a panel of distinguished citizens prepared by both houses. It was to have the power by a three-fifths vote to compel a referendum. But there have been a number of amendments: the seventh abolished the nation wide election, substituting election by both houses voting together; by the eighth the power to compel a referendum has been re-

placed by an increased suspending power for ordinary bills; the ninth reduced the qualifying age of candidates for election to the Senate from 35 to 30. Senatorial members are now sponsored by different parties. Whatever the future of the Senate, however, it has performed the initial purpose of representing minorities formerly opposed to the policy of independence from England. In the *Dail* elected by proportional representation for five years the narrow balance of parties and the tension of politics have not yet allowed the functions of the chairman or speaker to be clearly defined.

In South Africa the legislature has had to meet three important special problems. The first was the limitation in the constitution of 1909 on the power of Parliament to alter by ordinary legislation any part of the constitution concerning the rights of natives and the equality of the Dutch and English languages. Their inability to secure the assent of two thirds of both houses sitting together, which was necessary to alter the franchise for natives in the Cape, has led the Dutch to enfranchise all adult European women in order to swamp the native vote. In the second place, membership in the Senate was made in part elective (8 members from each of the 4 states) and in part nominative by the governor general in council (8 members, of which 4 were to have experience of native problems). This system arose from the desire in 1910 to placate provincial feeling and to find some seats for members of the expiring state legislatures. The present system, by which the senators are elected by the provincial assemblies and the members of the House of Assembly for the province, tends to bring them under the influence of the central government. In the third place, while parliamentary procedure is modeled on that of England, the influence of Dutch tradition and the period of crown colony regime from 1902 to 1907 have weakened the control of the legislature over the executive in finance.

K. SMELLIE

FRANCE. Although since 1788 France has never been without some legislative body or bodies claiming to represent a theoretically freely expressed will, the origins of the essential characteristics of the present French parliament may be traced back only to the bicameral legislative system created by the Restoration government (1814-30). Of the previous assemblies those of the revolution—the National Assembly (1789-91), which was formed by the combination of

the three orders of the old Estates General (*q.v.*); the Legislative Assembly (1791-92); and the National Convention (1793-95)—had exercised wide powers, including in the case of the first two constitutional functions as well as legislative and in the case of the third executive and judicial in addition. But no permanent tradition of internal organization or of competence emanated either from them or from the bicameral parliament of the Directorate (1795-99) or from the quadricameral arrangement (1799-1814) which Napoleon created to mask his personal autocratic rule.

The Chamber of Deputies and Chamber of Peers established in 1814 lasted until 1848, serving under both the Restoration and the July Monarchy (1830-48). These assemblies were provided for by the charter, which as originally formulated in 1814 envisaged in an ambiguous way and with many reservations a form of parliamentary government modeled on that of England; thus the Chamber of Deputies corresponded to the House of Commons and the Chamber of Peers to the House of Lords. During the Restoration period it was the essential preoccupation of the lower Chamber to impose upon the king a construction of the charter which would enhance its own powers. Oriented in a regime having at its disposal the highly centralized and powerful administrative machinery which has been characteristic of France since Napoleon, the Chamber aspired not merely to gain control of legislation but to develop checks upon a would be irresponsible executive. Its efforts led to perpetual conflicts between king, ministers and parliament, culminating in the revolution of 1830; but they resulted in the slow emergence of certain principles, which under the July Monarchy became firmly established. Parliament won publicity of debate and the right to initiate legislation. From its constitutional prerogative in the matter of taxation it evolved a certain control over the ministry, which it gradually developed into a strong tradition of ministerial responsibility through the creation of the technique of interpellation (*q.v.*), leading to a debate and a motion of no confidence. This weapon, officially recognized in 1831, became so integral a part of the French cabinet system that its restoration in 1867 after an interim of fifteen years, during which Napoleon III had forbidden its use, was heralded as marking the return to normal parliamentary conditions. Between 1848 and the establishment of the constitution of the Third Republic there intervened

the Second Republic (1848-52) with its successive unicameral national and legislative assemblies and the Second Empire (1852-70) with its bicameral parliament. But despite revolution and reaction the tradition of a powerful parliament endowed not only with the legislative function but with the control of the budget and the supervision of policy both in its general lines and in its administrative details survived and became inseparably linked with the government of the Third Republic.

The advances made under the Restoration and the July Monarchy were the work largely of the upper bourgeoisie who sat in the Chamber of Deputies. The Chamber of 1814 was the first French legislative assembly to be directly elected. The franchise was very narrowly restricted on a property basis and was broadened only slightly under the July Monarchy. The office of deputy, being without remuneration, could in any case have been held only by a person with considerable private income. From 1835 on there was a steadily growing demand for an extension of the franchise, in which were fused the idealism of Rousseau inspired politicians and democratic pressure from below. The climax was the Revolution of 1848, which permanently established universal suffrage. Since then at least one house of the legislature has been, as far as universal suffrage could make it so, the expression of popular sovereignty. In this atmosphere the nominated Chamber of Peers—already during the 1820's castigated by Chateaubriand as the "dried up débris of the Old Monarchy, the Revolution and the Empire"—progressively lost caste and influence. Until 1830 its powers with regard to both legislation and the ministry were coequal with those of the lower house and its influence frequently greater, but by 1848 it dwindled into an organ virtually superfluous to the processes of government.

The republican constitution of 1875, a compromise between republicans and royalists, established the Chamber of Deputies as a concession to the former and the Senate as a concession to the latter. The Senate was to be conservative—it was in fact expected by the royalists to be their mainstay in the transition which they hoped to effect to limited monarchy—but its members were nevertheless to be elected, although indirectly. The method of election of senators, as it has existed unchanged since 1884, is through electoral colleges meeting in each department and consisting of the deputies for that unit, the members of the departmental council and dele-

gates from the municipal councils. The deputies are elected directly by universal suffrage, the entire Chamber being completely renewed every four years; while the Senate, whose members are elected for nine years, is partially renewed every three years.

The continuous augmentation of parliamentary powers under the Third Republic has made the Chamber of Deputies the center of the political life of the nation. Its hold over the ministry has been unquestioned since 1877, when MacMahon's unfortunate attempt to dissolve it—the last of a series to which public opinion had never taken kindly—established its immunity to dissolution. Even more than the multiplicity of parties the fact that the cabinet cannot appeal to the electorate but must resign on a hostile vote has caused the proverbial instability of French cabinets. It is in the Chamber of Deputies, which is enshrined in the popular imagination as the meeting place of the recognized representatives of the people, that most bills originate.

But while the role of the Chamber has superficially eclipsed that of the Senate, the latter house continues to play an important part and may in fact be regarded as the chief contribution of the Third Republic to the practise of government. It enjoys fully coordinate powers in all matters save finance—and even there is far from helpless, since its consent is as necessary to the budget as to ordinary legislation and it may at any time suggest unofficially amendments which legally it cannot propose. It can make and unmake cabinets and has provided nearly as many ministers and premiers as the lower house; it cannot be packed or dissolved; its rejection of any measure is final, since no machinery exists either for solving a conflict between the two houses through joint session (which is summoned only for constitutional amendments and for electing a president of the republic) or for making the will of the lower house prevail, as is assured by the British Parliament Act of 1911. Since the Senate is usually averse to evincing open antagonism to the more popularly elected house, downright rejection is rare, although woman's suffrage has been definitely rejected on several occasions. It prefers to attain the same objective by imposing indefinite delays; thus the income tax and social insurance were ultimately carried only after years of adjournment and blocking amendments.

The prestige and authority of the Senate, which put it in close analogy with its American

homonym, have been due to a large extent to the fact that it has been able to attract men of weight and experience. Most deputies would willingly exchange their four-year tenure for the solid nine-year tenure of the senator. While the minimum age limit for the deputy is twenty-five and the Chamber has in fact a youthful complexion, the senators must be at least forty years of age. This venerable body, composed of *gens arrivés*, stands out in marked contrast to the Chamber, which under the Third Republic has drawn its membership from a constantly widening range of social classes and includes many of the upper working class. Another important factor is the relative size of the two assemblies: the 314 senators in the quiet Palais du Luxembourg transact their business with infinitely more dignity and solemnity than do the 612 deputies in the feverish atmosphere of the Palais Bourbon.

Nor has the Senate drawn upon itself the opprobrium that might attach to a consistently reactionary assembly. It is on the whole more conservative than the Chamber—a fact which is closely related to the manner of its election: in the senatorial electoral college the small communes, traditional strongholds of conservatism, are still heavily overrepresented, although the original constitutional provision for equal representation of all communes and municipalities regardless of their population was revised in 1884 in the direction of a more equitable distribution of influence. The Senate has been termed *le grand conseil des communes de France*. But precisely because it is elected by representatives of local bodies which have themselves been elected several years previously, it may at any particular time represent a phase of public opinion more radical than the Chamber. In the immediate post-war period, for instance, the Senate, representing pre-war moderately radical opinion, was more to the left than the Chamber elected at the height of the conservative reaction of 1919. If a strong and dignified second chamber is desired, it would be difficult to improve upon the French Senate.

The essential factor conditioning the normal functioning of parliament is its lack of cohesion due to the weakness of party organization. If the term party be taken to mean an organization engaged in systematic propaganda, presenting candidates for parliament and uniting its successful candidates into a parliamentary group in close touch with headquarters, there are in France but three parties: the Communist, the Socialist and the Radical-Socialist, of which the

last is distinctly less homogeneous than the other two. The numerous deputies and senators outside these parties are divided into groups varying in number and name not only from one parliament to another but from one session to another; few of them, especially those of the center, even vote together with any regularity. An atomistic tendency has been characteristic of French legislatures from the beginning: since the revolution there has always been evident a strong opposition to any rule or organization which might conceivably fetter the independence of the individual member—the sacrosanct choice of popular sovereignty. Once elected, the deputy is secure in his tenure for four years and he cannot be brought into line with the threat of a general election. On the contrary, ministerial changes always hold out the prospect of a possible portfolio. In the absence of party ties the parliamentarian becomes inevitably the representative not of a definite national policy but strictly of his constituents. He is responsible solely to a local committee for his selection as candidate and for his election; he frequently owes his seat only to a coalition of intrigues against a member who has offended some canon or bigwig of local politics. This situation entails obvious evils, which are the greater because it affects both chambers alike: measures are considered for their effect upon local affairs; many a potential statesman is precluded from entering politics by his lack of strong local connections; and parish pump politics tend to predominate.

As a result of the second ballot system most deputies are returned by a clear majority; this system, while not as accurate as proportional representation, tends to a greater stability of political forces than the British single ballot with plurality election. The "swing of the pendulum" has been less marked in France than in many countries and the World War in particular has brought no marked alteration in party alignments: France has for many years been divided into two approximately equal masses separated by a floating element that determines every four years which of the opposing policies shall prevail in the new parliament. This oscillating opinion, however, is liable to change before the four-year period is over; its representatives in parliament change too, with the result that parliamentary majorities which at the beginning of a legislature tend to be definitely right or left drift centerwards so that by the time it disappears every parliament tends to become a moderate body. The whole electorate, however, has been moving

slowly but steadily to the left for the last quarter of a century.

As no group or party has ever had a clear majority in either chamber, every cabinet is a coalition cleverly chosen so as to secure the support of the maximum number of groups in each house. At any given time there are several possible combinations or coalitions, each capable of securing a majority. The defection of a group may at any moment cause a ministerial crisis and lead to the formation of a new cabinet, often comprising a considerable proportion of the previous one, often even under the same premier. It follows from this that the vote of the individual member has much greater weight in the determination of policy than under the two or three-party system and that the leadership of a small group may give a second rate politician a decisive influence which the heads of even the largest parties must take into account. No French statesman can rely on the solid support of a party capable of obtaining an independent majority; he is rarely the only possible premier, and his success will depend largely on his handling of the groups nearest to his own to right or left, without whose support his cabinet could not survive even for a day.

By reaction against the centrifugal forces of French individualism, which remain unchecked by party discipline, there has been perfected under the Third Republic an elaborate machinery of bureaus and grand commissions. The former are haphazard divisions of members drawn by ballot and forming small groups out of which are selected a number of routine permanent committees of no political significance and the special committees to which all bills are referred for preliminary discussion. But it is the grand commissions, not the committees or the bureaus, which are the strongest organs in each house. Elected annually by the formal groups in strict proportion to their numerical strength, they form a sort of replica of the whole chamber and are permanent bodies, each charged with oversight of some definite sphere of government or administration.

Parliamentary commissions have had a long history in France; since the revolution the French have tended to delegate to them functions which the British Parliament has exercised as a committee of the whole house. It was through its various commissions—the Committee of Public Safety, the Revolutionary Tribunal and various other committees of inquiry and control—that the National Convention was able

for three years to dominate not only legislation but the administrative and judicial spheres. The precedent established by the National Convention, however, through its association with the Terror and with oligarchical authoritarianism caused later parliaments to seek to impose checks upon the power of the commissions. In this effort were joined the antiliberal groups which sought to diminish the power of the legislature and those who wished to keep the influence of the whole parliament from passing into the hands of the few. Hence the system which predominated from the Restoration period until late in the nineteenth century was that of special committees appointed either ad hoc for the consideration of each bill or for a brief period and limited to the legislative function. But the very multiplicity of bills, arising from the existence of unlimited private initiative, rendered the inefficiency of such a system increasingly intolerable; and during the closing years of the nineteenth century there was actually emerging an unofficial system of permanent commissions performing the functions for which the bureaux and the special committees were inadequate. Finally in 1902 in the atmosphere created by the drift of opinion in favor of an omnipotent legislature the Chamber of Deputies legalized the system of grand commissions, and its example was followed by the Senate in 1921. So important have the commissions become that it may safely be said that most parliamentary business is really transacted there. Each bill whether it originates from a private member or from the ministry, for the French refuse to discriminate between private and ministerial measures, is given its final shape and sometimes is so modified as to be completely transformed by the reporter of the commission. In consultation with the president of the assembly the reporter fixes the time for debate, which is directed by him rather than by the minister.

Since the French president has no veto power and can only formally promulgate bills which have been sent to him by parliament, the creation of laws really depends upon the agreement of the appropriate commission in each house, always provided that the latter experience no setback in engineering them through the fickle assemblies. The commissions can of course kill legislation by indefinitely postponing its consideration. The effective sphere of the commissions is administrative and political as well as legislative; and the most important of them, such as those for foreign affairs, the army and the

budget, are likely to direct policy quite as much as the responsible minister, who dares not jeopardize his already precarious position with regard to parliament by ignoring them. The chairmanship of such commissions is much sought: the chairman of the Senate Commission for Foreign Affairs is always an ex-minister of that department, often an ex-premier. So dominant is the part commissions play that there are widely divergent views as to their real utility in a parliamentary system. In the main, however, most critics would agree that they enable much important business to be transacted in a quieter and less partisan atmosphere than that of the whole house and that certain delicate matters of foreign policy can be treated therein with a secrecy of which the Chamber or Senate would be incapable. The principle of proportional representation, on which they are elected, by safeguarding the interests of minorities tends to diminish possible abuses of their powers.

The chaotic aspect of the French legislature, due to its inveterate aversion to restricting the freedom of the private member, has been gradually corrected by the imposition of certain rules and the development of a fairly efficient internal organization. The president of each assembly, who is assisted in the performance of his duties by a corps of vice presidents and secretaries, is now in possession of a system of sanctions, including an ultimate penalty of imprisonment, to punish refractory or obstreperous members. Debate, upon which there were no real restrictions until the Third Republic, is now so regulated that the time allotted to each member is determined either by his position or by the formal importance of his message. The president of each chamber, who is elected by the entire membership and who in view of the motley composition of the French legislature is likely to be non-partisan, has become a figure of considerable significance as the creator of the parliamentary time table and the director of debates. Through the *droit du chapeau* he can at any time by the simple ceremony of putting on his hat put an abrupt end to a futile discussion, a privilege, however, which he shares with the right of *clôture* vested in the whole house. His general position is recognized in the present established tradition that the president of the republic usually summons the president of each chamber on the occasion of a ministerial crisis. But on the whole there is a widespread sentiment in France among those who deplore the waste of time in the legislature and its frequent "scan-

dalous sittings" that his disciplinary powers should be increased.

No law compels ministers to be members of parliament, and the right of every minister to speak in both houses even if he be a member of neither has made it possible to bring non-parliamentary experts into the cabinet. This happens infrequently, however; generally the French cabinet like the British is an executive committee of parliament. In its relation to parliament it is both very weak and very strong. It has little control over the parliamentary time table: it must make reasonable room for private members' bills; its policy is under the constant scrutiny and even correction of the permanent commissions; it is exposed at any time to dangerous interpellations. On the other hand, its control of a vast amount of patronage, its strict hold on the entire administrative machinery and its power of establishing subordinate legislation by ministerial decree give the cabinet powers which would be quasi-autocratic were it not for the precariousness of its tenure.

There is no rigid division of powers in the French government. The parliament like the British is not so much a lawmaking body as an organ of government, sharing with other organs the general control of the whole political machine. In this connection the Senate's judicial function as the supreme court for the trial of offenses against the state on the motion of the lower Chamber is significant, although this power has been used almost exclusively for political rather than strictly judicial purposes. In a general way the competence of parliament is virtually unlimited; and as the so-called fundamentals of the constitution are very few, no court of justice would seriously challenge the validity of any formally promulgated law.

There are two outstanding characteristics of French legislation. First, there is a comparative dearth of constructive legislation, especially in the social and economic spheres, a phenomenon which can be explained partly by the fact that legislation is not the primary function of parliament, cabinets being judged more by their general policy and capacity to govern than by their legislative achievements; and partly by the lack of interest in economics shown by a people deeply distrustful of any attempt at interference with the free play of economic interests. Second, there is the tendency arising from an exaggerated national sentimentalism to flood the most concrete problems with a torrent of abstract considerations which serve only to confuse the

issues. In the main French legislation is cautious and moderate; really sweeping measures or drastic changes are rare.

ROGER SOLTAU

GERMANY AND AUSTRIA. *Germany.* During the first half of the nineteenth century, under the influence of French revolutionary ideology, there arose in the German territorial states, which hitherto had been absolute monarchies, political movements for the establishment of a constitutional state operating through legislative assemblies. The bourgeoisie freed from the domination of the privileged estates and no longer satisfied with mere civil liberties and rights aspired to a share in political power. Basing itself on Montesquieu's theory of the separation of powers rather than on Rousseau's radical democratic theory the constitutional movement in Germany set itself the comparatively modest goal of restricting the unlimited power of the crown by means of a parliamentary regime. Participation of the people's representatives in a national legislative assembly and separation of constitutional powers became the dominant concepts of German constitutional theory.

The first successes were gained in the south German states which were more exposed to French influence and in a number of small states in central Germany. In 1816 Goethe's friend Grand Duke Karl August of Saxe-Weimar granted a constitution; Baden and Bavaria followed in 1818, Württemberg in 1819 and Hesse-Darmstadt in 1820. In northern Germany, however, particularly in Prussia, the feudal tradition was more persistent and offered a more solid front against the liberal offensive. It was not until the March Revolution of 1848 in Berlin and the convocation of the National Assembly in May that the constitutional movement may be said to have made any appreciable headway in Prussia. Even then the representative principle was given short shrift and after the dissolution of the Frankfurt National Assembly the Prussian constitution was proclaimed by the king alone. All the state parliaments of this period were of the two-chamber type.

The persistent attempts, chiefly on the part of the advocates of German unification, to inaugurate a centralized parliamentary regime with a single representative assembly speaking in the name of a united nation were repeatedly frustrated during the first half of the nineteenth century. The work of the National Assembly in 1848 despite its establishment of a provisional

central authority and its drafting of a parliamentary constitution proved abortive, in large part because of the refusal of the king of Prussia to accept the imperial crown from its hands. Prussia's defeat of Austria in 1866 may be singled out as the turning point in the struggle for a parliamentary regime on a national scale. The acknowledgment by Austria of the dissolution of the German Confederation brought to an end the ineffective federal diet (Bundestag) and left the way open for Prussia to assume the initiative in evolving a genuinely national representative system and constitution. After concluding various alliances with the north German states Prussia established in 1867 a constitutional union, the North German Confederation, with a central Reichstag composed of popular representatives elected by manhood suffrage and a second body, the Bundesrat (*q.v.*), consisting of the instructed representatives of the various state governments chosen without popular election. The responsibility for legislation was to be shared by the two bodies collaborating on virtually equal terms.

The incorporation of the south German states following the Franco-Prussian War completed the work of unification and made possible a uniform representative system with legislative assemblies, national and state, modeled on the original North German Confederation pattern. This form of German legislative assembly remained practically unchanged in the several states and in the Reich down to the revolution of November, 1918. Although the power of the Reichstag became gradually strengthened and the dominance of the privileged estates in Prussia began to be undermined, the parliamentary system, both in the Reich and in the several states, was unable to break through the older restrictions with which from the outset it had been trammelled. In neither the national nor the state government did the popular legislative body prove itself capable of assuming a decisive role in the administrative or executive spheres.

The events of the November revolution raised a serious doubt as to the future of the parliamentary system. Revolutionary forces were striving for the establishment of the Soviet system and the proletarian dictatorship, and in certain states—notably Bavaria—the movement gained a momentary success. But eventually the democratic parliamentary system won out. The German National Assembly, elected by universal suffrage, met in Weimar on February 6, 1919, and was greeted by Ebert as the supreme sov-

ereign body of Germany. A second legislative body, the Committee of States (*Staatenausschuss*), although it participated in legislation, was excluded from an active role in the creation of the new German constitution, a role which was reserved for the National Assembly alone. After thorough discussion in the Constitutional Committee the constitution was adopted in the National Assembly and went into force on August 14, 1919.

The new German constitution endeavored not only formally to incorporate the change from monarchy to republic but also to give substance to the concept of democracy. Whereas the preamble to Bismarck's constitution had conceived of the Reich as an enduring confederation of German dynasties, the Weimar constitution confronted with the *fait accompli* of dynastic overthrow states in its preamble that the constitution is the work of the German people. The constitutional principle of the democratic republic as laid down in article 1 conferred unprecedented powers upon the people's representatives; while the provisions for popular initiative and referendum, woman suffrage and proportional representation went still further in the direction of pure democracy. But despite these significant gains the really decisive political achievement of the November revolution was article 54, which officially ushered in a genuine parliamentary regime, with the participation of the Reichstag in administrative and executive functions. "The Chancellor and the ministers of the Reich require the confidence of the Reichstag for holding and exercising office. Anyone of them must resign if the Reichstag withdraws its confidence in him by expressly so voting." Thus the president, although he has the right of appointing and dismissing the government, can exercise this right—at least under normal political conditions—only with the concurrence of the Reichstag majority. The Reichstag cannot be convened or adjourned except by its own consent, while the regulation of its activities is entirely in the hands of its duly elected president; it controls the election of the president of the Reichstag and his assistants and of the various committees, determines parliamentary agenda and procedure and enjoys far reaching powers in the appointment of investigating committees, which have the right of access to the records of courts and administrative agencies.

The Reichstag is the real lawmaking body, although the people may in certain cases act directly as the supreme legislature. Bills may be

introduced either by the government or by private members; in the latter case, however, they must bear the signatures of at least 15 deputies. Government bills must have the approval of the Reichsrat; that body as well as the Reichswirtschaftsrat may introduce its own bills through the cabinet. When the cabinet, the Reichsrat and the Reichswirtschaftsrat disagree over a proposal the divergent viewpoints must be made known to the Reichstag.

The legislative powers of the people are exercised through popular initiative. Proposals so initiated must be submitted to the Reichstag by the government, which must present its own views on the subject. If the measure is not accepted as submitted, a popular referendum is required. Under normal circumstances the budget bill must be passed by the Reichstag, and favorable action by it is also required for the appropriation of credits and the guaranteeing of securities by the Reich. Declarations of war and the conclusion of peace likewise call for legislation by the Reichstag, which must also ratify treaties that require legislation to make them effective. Article 48 of the constitution, however, gives the president wide powers of legislation by decree in time of emergency; the extent of these powers became apparent in 1932, when the budget was balanced and credits appropriated by such decrees without action by the Reichstag.

An important power of the Reichstag is that which permits it by a two-thirds vote to propose to the people the deposition of the president of the Reich. Rejection of such a motion by the people is considered tantamount to reelection of the president and results in the dissolution of the Reichstag. The Reichstag may also indict the president, the chancellor or the ministers before the Reichsstaatgerichtshof for violation of the constitution or the laws. Finally, it may abrogate measures decreed by the president under article 48 of the constitution.

Members of the Reichstag are legally "representatives of the entire people," not of particular constituencies; "they are subject only to their consciences and are not bound by instruction." In practise, however, the representative gives allegiance to his party and to his group in parliament. If he fails to vote on important questions with members of his group he may be expelled from his party, but this does not involve the loss of his seat. There is no legal way by which he can be forced to resign his mandate.

Although the constitution of the Reich does not mention parties, the standing orders of the

Reichstag as of all German legislature gives them explicit recognition. In the Reichstag a parliamentary group is a union of at least 15 members. The membership of the Reichstag organs, such as the *Ältestenrat* (Council of Elders), the *Vorstand* (Presidium) and the committees, is selected from the groups in proportion to their numerical strength; the individual deputy is placed in a distinctly secondary place with no possibility of independent action. Deputies possess all the usual parliamentary immunities.

The most important features of the Reichstag are the *Vorstand* and the committees. The *Vorstand* is composed of the president, his representatives and the secretaries, who are elected by the Reichstag for one electoral period. The president has considerable power: he directs the business and deliberations of the Reichstag, maintains order, controls the police in the Reichstag building and has a consultative voice in all committees. He is assisted by the *Ältestenrat*, which is composed of the president, his representatives and 21 members who are designated by the party groups. The primary task of this body is to promote mutual understanding between the groups and when agreement proves impossible to assist the president in his decisions.

The constitution provides for two standing committees, the Committee for Protection of the Rights of Parliament (*Ausschuss für die Wahrung der Rechte der Volkvertretung*), called also the Committee of Control, and the Committee for Foreign Affairs (*Ausschuss für auswärtige Angelegenheiten*), both of which function also between sessions of the Reichstag. In addition the Reichstag appoints a number of other standing committees, including a Committee of Procedure (*Geschäftsordnungsausschuss*) and a Committee of the Budget (*Ausschuss für den Reichshaushalt*). In addition to the standing committees the Reichstag forms special committees, the most important of which are the investigating committees, which must be appointed on the demand of one fifth of the Reichstag. Judicial and administrative officials must on demand submit evidence and records to these committees. Inquisitorial power is possessed also by the two constitutional standing committees.

Most of the real activity of the Reichstag takes place in the committees, plenary sessions being employed primarily to sanction committee decisions and formulate general policies. The deliberations of the full Reichstag proceed according to an order of the day which is established in

principle by the president. Propositions and motions can be discussed only when they have been printed and distributed to the members. Certain bills, including motions concerning the budget and ratification of treaties, must go through three sessions, as may also proposals emanating from the cabinet or the Reichsrat, whether or not they require legislative action; all other measures are treated in one session. Thirty members of the Reichstag may submit an interpellation, while 15 may raise questions of lesser importance; the government is not bound to answer these demands for information. Interpellations are answered orally, if at all, in sittings designated by the government. On the demand of 50 members a discussion may follow. Questions of lesser importance are usually answered by letter without discussion. Any citizen may petition the Reichstag; such petitions are first sent to the appropriate committee and then acted upon by the entire Reichstag.

Only members of the Reichstag, members of the federal government and its commissioners and representatives of the states may speak in the Reichstag; speeches are ordinarily limited to one hour. The president determines the order of speakers. He is supposed to take into account both the strength of the different groups and the requirements of efficient deliberation. Normally the decisions of the Reichstag are made by a simple majority except for alterations in the constitution, which require a two-thirds vote. Two thirds of the deputies must be present when the constitution is to be altered; otherwise more than one half the members constitute a quorum.

The powers of the legislative assembly are in some respects explicitly curbed by the Weimar constitution. Although in the exercise of his governmental functions the president is required to have the countersignature of his parliamentary ministers, he is empowered in the absence of a reliable government majority in the Reichstag or in case of serious conflict between the government and the Reichstag to appoint an emergency cabinet and to dissolve the Reichstag; so that in the event of close accord between the president and the cabinet the way is open to a virtually dictatorial suppression of the representative bodies. Another counterweight against the popular legislative assembly is the power of the non-responsible bureaucracy, which plays an increasingly influential role in government and administration. The Reichswirtschaftsrat, embodying the principle of functional representa-

tion and intended as a further counterbalance to the purely political representation provided by the Reichstag, has on the whole fallen short of expectations.

The principle of popular representation is offset to a greater degree by the Federal Council, or Reichsrat, which like the earlier Bundesrat is composed of instructed representatives appointed by the governments of the several *Länder* composing the German federation, but which unlike its predecessor is limited in its legislative role to the power of veto on the decisions of the Reichstag. In the present upper chamber the principle of federalism is more genuinely observed, thanks to the care of the constitution makers at Weimar to bring to an end the long standing hegemony of Prussia in the Bundesrat. The votes of members of the Reichsrat follow the policies of their state governments, whose instructions they must carry out. As these governments are formed by constantly shifting coalitions, the Reichsrat is characterized by a lack of stability, which reflects the turmoil of parliamentary struggles within the states. The homogeneous character of the former Bundesrat was preserved by the dominance of Prussia. This influence has been removed from the Reichsrat and the instability increased by the fact that the votes of Prussian provinces may differ from the votes of the Prussian central government.

When a bill passed by the Reichstag is rejected by the Reichsrat it goes back to the lower house for a second vote. If the two houses cannot finally agree the president of the Reich may submit the bill to a popular referendum; budget and financial laws are not subject to referendum. On most of the few occasions on which the Reichsrat has exercised its power of rejection it has been sustained. Submission to a referendum has not yet occurred. The Reichsrat has no power over the federal executive, which is required by the constitution merely to "keep it informed of the management of the federal affairs." The Reichsrat has nevertheless acquired a position of considerable influence, largely because of its usefulness in adjusting the interests of the Reich with those of the individual states. The Reichsrat functions through eleven committees, on none of which may any state have more than one vote; the larger states are represented on all the committees.

There is no constitutional provision in Germany that members of the cabinet must belong to the Reichstag, and there is an increasing tend-

ency to put non-members in the government, as, for example, in the case of the "presidential" von Papen government in 1932. The bureaucracy is likely to be heavily represented in the government, both because of its traditional importance in Germany and because of the growing difficulty of forming effective coalition governments.

Individual ministers and the cabinet as a whole are required to resign only in case of an explicit vote of censure by the Reichstag; resignation cannot be forced merely by rejection of a government bill. Direct votes of censure are rare in Germany, although the opposition frequently threatens to employ this weapon. The fall of a government is usually brought about only by some major political event, such as an election.

The successful functioning of a legislative assembly, with its premium on compromise, is contingent upon the general recognition of certain basic premises determining the limits within which the struggle for parliamentary domination must confine itself. When powerful groups challenge these basic premises, the very system itself is endangered. This danger has been especially grave in Germany. Unversed in the technique of a two-party system, the leaders of the numerous small parties in Germany witnessed a still further complication of their problem in the form of proportional representation. Although the coalition engineered at Weimar by zealous parliamentarians speaking in the name of Socialists, Catholic Centrists and the bourgeois democratic parties was expanded to include the other parliamentary party groups of the right, the spectacular rise of the Communists and the National Socialists has seriously threatened the waning strength of the liberal parliamentary coalition, paralyzing even its legislative functions, which have had to be taken over by the executive power in the form of emergency decrees.

Article 17 of the German constitution obliges the *Länder* to introduce a republican constitution, a democratically elected legislative assembly (*Landtag*) and a government responsible to the assembly. The composition, functions, organization and procedure of the state legislatures are essentially the same as in the Reich, although in a number of cases the *Landtag* is empowered to elect the president and in others the entire government. In many *Länder* the intensification of party differences has made it impossible for the assembly to form a government, so that the old government continues to function although it no longer corresponds to the will of

the people as expressed by the changed make up of the legislative assembly. In general it may be said that the parliamentary system has grown more and more paralyzed, especially in the smaller German states.

Although the constitution does not differentiate between the several German states, the extraordinary differences in size of the various states has an unfortunate effect. The overwhelming predominance of Prussia has created a serious problem as to its political relationship to the Reich. The fact that two great legislative assemblies, the Reichstag and the Prussian *Landtag*, two governments—the Reich government and that of Prussia—and a powerful Reich and Prussian ministerial bureaucracy are all concentrated in Berlin has seriously hampered the political development of Germany when, as is often the case, the political composition of the Reich differs from that of Prussia.

Austria. When the proclamation of the democratic republic of Deutschösterreich made in October, 1918, by the German bloc of the former Austrian Chamber of Deputies (*Abgeordnetenhaus*) acting as a provisional National Assembly was countermanded by the peace treaties of Versailles and Saint-Germain, Austria set up a separate republican regime of its own based on a constitution which gave full recognition to parliamentary and federalistic principles. The two assemblies—the Nationalrat, elected by universal suffrage, and the Bundesrat, elected by the provincial diets—shared the responsibilities of legislation and acting together (as a *Bundesversammlung*) selected the president. As in Germany, however, the selection as well as the overthrow of the government was the prerogative of the popularly elected branch. As the result of a growing demand in many quarters for a more adequate system of checks and balances a revision of the constitution in December, 1929, transferred the election of the president to the people and at the same time extended his prerogatives to include the appointment of the members of the government and the dissolution, with the concurrence of the government, of the popular assembly; the popular election of the president was abandoned in 1931. The parliamentary principle has persisted without modification in the legislative assemblies of the various *Länder* which comprise the Austrian federation. The procedure in the Austrian legislative assemblies does not differ in any important respect from that of the Reichstag.

OTTO KOELLREUTTER

SWITZERLAND is a federal state whose constituent cantons enjoy a very large measure of legislative autonomy. The Federal Assembly is composed of two houses: the National Council (Nationalrat, Conseil National) and the Council of States (Ständerat, Conseil des États). Bicameralism, which was introduced into the federal constitution in 1848, represented an adaptation of a foreign institution in order to reconcile the two conflicting tendencies of local independence and national unity. Since the thirteenth century the Swiss cantons had considered themselves as sovereign states bound together by successive treaties only for purposes of external defense and internal peace. This long tradition of cantonal independence has been interrupted only for a few years under the impact of the French Revolution. In 1848 after a brief civil war, in which a minority of Catholic cantons, claiming complete autonomy and attempting to set up a confederacy of their own, had been crushed by the Protestant majority, this tradition was still strong not only in the defeated cantons but also among the less democratic elements in most Protestant cantons. The forces of the past were in favor of maintaining a loose confederacy, in which the cantons should remain their own masters and the federal authority should be represented by a single body equally representative of the constituent states. These conservative tendencies were those of a religious and social minority which could justly claim to be the true descendants of the founders of the republic and the more faithful exponents of its traditions. The majority of the people, however, had become impatient of political privilege and internal disunion. They sought to establish a new republic freer and stronger than the old and based on democratic equality and national unity—a commonwealth in which the preponderant sovereignty would be shifted from the cantons to the federal state and from the privileged few to the whole people. Both as a theoretical corollary of their democratic faith and as a practical protection against reactionary minorities they therefore favored the establishment of a single central legislature directly representative of the people. The bicameral system was clearly a compromise between these two tendencies. In one house the cantons were each to be represented by two deputies; in the other the people were to be directly represented on the basis of one deputy for 20,000 inhabitants.

This solution was a conscious imitation of the American arrangement conceived under similar

circumstances more than half a century before. The American example had been discussed in countless pamphlets and speeches in Switzerland from the beginning of the nineteenth century and deliberately championed by some of the leading Swiss statesmen in 1848, but it was not copied in all its details.

The constitution of 1848 provided that every canton was to have one representative in the National Council for each 20,000 inhabitants and at least one. The elections, on the basis of manhood suffrage, were to take place every third year by absolute majority in electoral districts defined by federal statute. This system was retained in the revised constitution of 1874, but after two unsuccessful attempts in 1900 and 1910 proportional representation was finally introduced by popular referendum in 1918, each canton forming one electoral district. In 1931 the term was raised to four years and the electoral quota to 22,000 inhabitants. The number of members, which had been 111 in 1848 and had risen, because of the increase in population, to 198 in 1930, was thus reduced to 190 in 1931. All proposals to substitute the population of Swiss nationality for the total population as a basis of representation, which have been put forward from time to time by deputies of rural cantons in an attempt to increase their relative importance, have been defeated.

The method of electing the members of the Council of States was not fixed in the constitution and varies from canton to canton. At first generally elected by the cantonal legislatures, they are now chosen by secret popular vote in seventeen cantons, by the *Landsgemeinde* in four and by the cantonal legislatures only in four. Their term of office varies from one year in five cantons to four years in one. In eighteen cantons the term is three years.

Despite the growth of the influence of the executive the development of the federal civil service and the extension of the jurisdiction of the Federal Tribunal the revised constitution of 1874 like that of 1848 declared that the Federal Assembly possessed "the supreme authority of the Confederation," and expressly charged the Assembly with the duty of "dealing with all matters within the competence of the Confederation which have not been entrusted to another federal authority." In practice the Federal Assembly is much more than a mere lawmaking body. Besides its legislative functions, which it shares with the people, it has executive and judicial duties. As an executive organ it is respon-

sible for the army, whose commanding general it elects in case of war; for the granting of subsidies and concessions; and for the supervision of the Federal Council, or federal government, whose members it elects every four years and whose administration it controls on the basis of an annual report submitted to it by the council. As a tribunal it settles disputes of public law and is the final judge of the constitutionality of its own legislation.

The two houses always sit simultaneously and as a rule in public. The constitution provides for one ordinary session annually and for extraordinary sessions at the request of the Federal Council, of a quarter of the members of the National Council or of five cantons. Since the World War the Federal Assembly has met four or five times yearly for sessions of an average duration of three to four weeks each. Joint sessions of the two houses are exceptional. They take place under the chairmanship of the president of the National Council to elect the government, the federal tribunals, the chancellor of the confederation and the commanding general and to consider certain judicial matters. Except for the fact that the National Council, being more numerous, dominates the Federal Assembly when in joint session the constitution provides for the absolute equality of the two houses. Neither enjoys any special rights or privileges. All legislation, including the annual budget, may be introduced first in either house and cannot become operative until agreed to by both. Although there is no constitutional way out of a deadlock, in practise no deadlock has ever proved very troublesome.

The legislative initiative belongs to the government, to each member of both houses and to any canton by correspondence. The rules of the Federal Assembly restrict the exercise of this right of its members to the presentation of motions inviting the government to formulate bills for legislative approval. Members of the government, who cannot belong to either house, may and constantly do participate in the debates on bills. In each chamber half the members constitute a quorum. All votes are taken by majority of the deputies present, voting by proxy being unknown.

In spite of its exceptionally strong constitutional position the Federal Assembly is relatively weak when compared to most foreign parliaments. This is due mainly to the permanence of tenure and consequent strength of the Federal Council. As the members of the government are

in practise always reelected and as members of the Assembly are not expected to devote themselves exclusively to their legislative duties, the former are in their dealings with the latter in the position of professional experts addressing amateurs. The permanence of the government has led to a corresponding lack both of executive ambition and of executive experience on the part of the Federal Assembly. As the Assembly usually includes no former members and but very few future members of the federal government, its function in fact often resembles that of an advisory rather than of a sovereign body. Government measures are seldom seriously amended and still more seldom rejected by the legislature, which in this respect has always shown itself far more docile politically than the people at the polls. The success of the referendum in Switzerland is both a cause and a consequence of this extreme parliamentary docility.

The same is on the whole although perhaps to a less extent true of the cantonal legislatures, all of which are unicameral. They vary in size from 51 in Nidwalden, the smallest canton, to 230 in Berne, the largest. Of the 25 cantonal legislatures, 17 are elected by proportional representation and 8 by majority vote. The basis of representation ranges from 250 in two small cantons to 3000 in Berne. The term of cantonal legislatures ranges from one year to six years, the most common being four years. The sessions of most cantonal legislatures are short and correspondingly numerous, so that their members, who are drawn from all walks of life and are never professional politicians, may attend without neglecting their own affairs.

W. E. RAPPAHD

THE NETHERLANDS. The States General of the Kingdom of the Netherlands is descended historically from the States General of the Republic of the United Provinces of the Netherlands (1581-1795), from which it differs, however, in several important respects. The earlier assembly in turn was similar in structure and functioning to the provincial states, from which it derived its authority.

The provincial states were the representatives of the municipalities, the nobility and the clergy, summoned by the sovereign of the county or duchy to pass on important questions, such as the succession to the throne and the voting of taxes, especially for wars. The organization of the states varied in the different provinces and in the same province from time to time. After the

Reformation the influence of the clergy declined. The nobility was most influential in Gelderland and Utrecht and least so in Holland, which was by the sixteenth century the richest and most important province. In the northern provinces the rural districts possessed significant representation. In general each town had only one vote but might send as many deputies as it chose; the deputation merely expressed the will of the town and in important cases referred the matter back to the municipalities (*vroedschappen*) for their decisions. Each town was bound only by its own vote. Essentially then the provincial states represented a loose confederation of sovereign municipalities.

As several provinces came under the control of a single person, states were sometimes summoned for two or more provinces. The most important of these joint assemblies was that of Holland and Zeeland. In 1465 Philip the Good, having acquired almost all the Netherlands provinces, summoned representatives of all the states of the Low Countries to a States General to recognize his son as his successor and to vote supplies for a war with France. Until 1477 the States General was an irregular organization, which came into existence only at the call of the sovereign. In that year the Great Privilege, among other concessions, gave to the States General the right to convene on its own motion and to pass upon declarations of war and the marriage of the sovereign. The provincial states by separate grants also acquired the right to meet at their own wish. But the provisions of the Great Privilege were frequently violated by Maximilian and definitely abrogated by Philip the Fair in 1494. The States General was summoned increasingly frequently but only at the will of the sovereign and to consider his requests for supplies. Control of the purse was utilized by the States General, however, as a means of obtaining redress of grievances from the government, which was largely in the hands of foreigners. A proposal to institute in the Netherlands a form of permanent sales tax, similar to the *alcabala* (*q.v.*) in Castile, which would have made the sovereign independent of the States General, was rejected by that body in 1569. After the abjuration of Philip II in 1581 the States General functioned as the principal central organ of government for the highly decentralized republic.

The States General under the republic functioned like the early provincial states, except that its sessions were permanent. Each province had only one vote, by which alone it could be bound

in important matters; the deputations, chosen by the provincial states, were sworn to act in the interest of their mandators; they had to follow instructions and refer all important disputable matters back to the provincial states. Since the latter were ultimately controlled by the municipalities, under the republic it was in the *vroedschappen* that real political control ultimately resided. The States General, dominated by Holland, which bore the greatest tax burden, appointed the officials of the republic and controlled foreign affairs, the army and navy and finances. The executive body of the republic was the Council of State (*Staatsraad*), the members of which were chosen by the provincial states but took an oath to act in the general interest; the council prepared the military budget and its allocation among the provinces, but the consent of each province was required for its particular levy.

After the defeat of Napoleon had restored to the Netherlands the independence taken from it in 1795, a new States General was set up in 1814. It was a bicameral legislature, with a First Chamber nominated by the king and a Second Chamber by the provincial states. But, unlike the old States General, the members of the new were forbidden to consult with their mandators and were sworn to follow their own conscience and to vote in the general interest. This change marked the definite shift of legislative power to the States General. In 1848 direct election of the members of the Second Chamber and of the provincial states and election of the members of the First Chamber by the provincial states were introduced. In 1917 universal suffrage for men and women was introduced for the election of members of the municipal councils, the provincial states and the Second Chamber of the States General. The First Chamber can neither initiate nor amend legislation but must accept or reject it as presented. A proposal to abolish the First Chamber failed in 1922, but the matter is still occasionally agitated. The *Staatsraad* continues as an advisory body to the government on all legislative matters and acts as an intermediary between the sovereign and the Second Chamber.

The States General has the right of inquiry, and its commissions if authorized by the assembly can compel testimony and the production of papers. Individual members possess the right of interpellation and the usual parliamentary privileges and immunities. Members of the cabinet may sit in either Chamber and answer questions but cannot vote unless members of the particular Chamber. Before the World War both cham-

bers followed the French system of committees: each Chamber divided into five sections by lot; for each particular measure each section chose one member; he reported to his section, which then debated the measure. This system is still used in the First Chamber, but since the World War the Second Chamber has tended increasingly to use standing committees, chosen not from the sections but by the president of the Chamber or by the plenum; these committees report directly to the Chamber and disregard the sections entirely.

Ministerial responsibility to parliament was conceded in the constitution of 1848 and until the World War governments were practically responsible to the Second Chamber; the veto power possessed by the king was rarely employed. During the war and post-war periods the functioning of ministries on the basis of a majority support in parliament proved almost impossible and the country was ruled largely by extraparlimentary ministries which revived the monarchical veto.

A. C. JOSEPHUS JITTA

SCANDINAVIAN STATES AND FINLAND. *Sweden.* Popular representation in Sweden dates from 1435, when for the first time representatives of the various social classes met in a national assembly, or Riksdag (day of the realm), to consult with the regent on affairs of state. Such meetings were held sporadically thereafter, being summoned usually only in emergencies when the king needed popular support against the nobles or some foreign power. Not until the seventeenth century under Gustavus Adolphus was the composition of the assembly fairly definitely fixed; it consisted then of representatives of the four estates: the nobility, the clergy, the burghers and the peasants. Its procedure was defined also during this period and its authority increased. During the so-called age of freedom (1718-72) the Riksdag held a dominant position in the government and a parliamentary system was applied, although it was controlled more by the central bureaucracy than by the people. The parliamentary system survived even the revolution of 1772, by which Gustavus III ended the supremacy of the Riksdag.

Even after the great constitutional reform of 1809-10, which brought about a balanced rule between king and people, the organization by estates was maintained. It was finally abandoned in 1866 with the institution of a two-chamber system, which has gradually been made more

democratic, the last time by the constitutional changes of 1918-21.

The 150 members of the First Chamber are elected indirectly for eight years, in such a way as to give the Chamber new members each year, by provincial assemblies or in the cities by electoral bodies chosen by all men and women over twenty-seven years of age. The 230 members of the Second Chamber are elected directly for four years by all men and women over twenty-three years of age. Proportional representation applies in the elections to both chambers.

In power and in actual influence the two chambers are practically equal. If they differ on financial questions, however, they must vote jointly, a procedure which favors the Second Chamber. In recent years the First Chamber has once caused a resignation of the cabinet (the Branting ministry in 1923) by defeating a government bill. Financial supervision over the administration is maintained through an elected committee of revisers, which works between legislative sessions. The minutes of cabinet meetings are checked by a parliamentary committee, and ministers who have acted illegally can be cited before a national court composed of high officials. Finally, the Riksdag can apply to the king for dismissal of members who have given bad advice. In practise these methods of enforcing responsibility are no longer used. It is customary, however, for the Committee on the Constitution to criticize specific governmental acts, which are later debated in the Riksdag. The Swedish committee system is peculiar in that the more important committees, seven in number, for which the constitution provides, are shared by the two chambers, containing as a rule from 8 to 10 members from each. The Swedish practise of not admitting cabinet members to the committees is also unusual.

Norway. The Norwegian parliament, or Storting, instituted by the constitution of 1814 consists of a single chamber of (since 1919) 150 members elected by the proportional system by the votes of all men and women over twenty-three years of age. One third of the mandates are assigned to the cities and two thirds to the country districts, a rule which has hitherto favored the cities. Even during the union with Sweden (1814-1905) the Storting acquired great influence over the government and since the dissolution of the union the parliamentary system has prevailed, although the constitution does not provide for it. The Storting enjoys unusually

wide powers; the monarch has no power of dissolution and in legislative matters only a suspensive veto.

As in Sweden minutes of cabinet meetings are inspected by a Storting committee. If it appears that cabinet ministers have made unconstitutional or obviously harmful decisions they may be summoned before a national court composed largely of Storting members. Such a case occurred most recently in 1926-27 but ended in an acquittal. In the handling of most questions the Storting is divided into two sections, the Lagting, elected by the Storting and consisting of one fourth of its members; and the Odelsting, made up of the remaining three fourths. Legislation is taken up first by the Odelsting. If the Lagting does not approve its decision the entire Storting meets and gives a final verdict, for which a two-thirds majority is required. There are seventeen permanent committees with definite assignments. In practice cabinet ministers may by special request attend the meetings of legislative committees.

Denmark. The composition of the representative assembly instituted in Denmark in 1849 has undergone various changes. It is divided into two chambers, Landsting and Folketing, both elected by the proportional system. Since 1915 three fourths of the 76 members who compose the former have been chosen by direct vote of all men and women over thirty-five years of age; the remaining 19 members are elected by the Landsting itself. The term of all members is eight years. The 149 members of the Folketing are chosen for four years by direct vote of all men and women over twenty-five years of age. Twenty-four seats are set aside to be allocated after the election to those political parties which have not secured representation proportionate to their voting power. In principle both chambers are of equal rank; but the Folketing actually has the greater power, exercising decisive control over the government. Financial measures are first introduced in the Folketing, going to the Landsting so late in the session as practically to nullify the latter's right to make changes. The Folketing can cite ministers before a court composed of judges and representatives of the Landsting. At the democratic reformation of the representative system in 1915 a rule was introduced that the Landsting may be dissolved only if it rejects a measure which has twice been adopted by the Folketing, the second time after regular new elections. The Folketing, on the other hand, may be dissolved at any time. This has happened

several times in recent years when there has been no clear majority.

At least five permanent committees are appointed in the Landsting at each session and six in the Folketing; these committees are composed of 5, 7 or 9 members. Each chamber has furthermore a budget committee of 15 members. The competencies of these committees are indistinctly indicated; special committees are often appointed to consider important proposals. Ministers frequently attend committee sessions, although there is no fixed rule.

Finland. During its union with Sweden, Finland had no special legislative representation. The Russian conquest was followed by the summoning in 1809 of an assembly composed of representatives of the four estates, nobility, clergy, burghers and peasants. After 1863 this assembly was convoked regularly but there was no definite division of powers between it and the regent (the Russian emperor). In 1906 a thoroughly democratic reform was instituted, with an assembly composed of 200 members chosen for three years according to the proportional system with universal suffrage for men and women over twenty-four years of age.

When Finland became independent in 1917 the legislature took over all powers of government and in 1919 adopted the present constitution, which provides that the government must enjoy the confidence of the legislature and makes that body the center of Finland's political life. A committee of the legislature, the Constitutional Committee, checks upon the official acts of the ministers; when illegal acts are discovered the legislature may summon cabinet members before a national court composed of high state officials and legislative representatives.

The president has on two occasions, in 1924 and 1930, used his right to dissolve the legislature and order new elections. These dissolutions, however, were brought about not by any real political conflicts but by special circumstances (in 1930 the so-called Lappo movement) which made new elections desirable.

The legislative committees are of great importance. Besides the five special committees which must have from 11 to 21 members, each appointed to handle different groups of subjects, there is the so-called Great Committee composed of at least 45 members. The functions of this committee resemble in some respects those of the Norwegian Lagting. After a bill has been discussed in its appropriate special committee and in the legislature itself it goes to the Great

Committee. The legislature cannot take final action until this committee has reported. Under a special rule ministers may attend committee sessions unless the committees vote to exclude them.

The legislative assemblies of all the Scandinavian states have certain traits in common. The number of professional politicians in them is relatively small, the electors to a great extent choosing representatives of their own social classes. About half the members of the Swedish Second Chamber, for instance, are either farmers or manual workers; the same situation exists in the other countries. The debates are characterized by a matter of fact tone; brilliant oratory or personal attacks are unusual. Committee sessions are of great importance, probably because of the fact that minority governments have been common. The decisive negotiations between parties take place in the committees, where the necessary compromises are prepared. Although the legislatures have been criticized at times for incompetence and logrolling, their prestige is comparatively high and there is little opposition to the representative system. Charges of corruption are rare.

HERBERT TINGSTEN

HUNGARY. The origin of the Hungarian Parliament is at present a highly controversial question. According to the most recent theory the Hungarians originally had the same patriarchal and autocratic form of legislation as the other Mongolian peoples, the Huns, Avars and Turks. The conversion of the Hungarians to Christianity and the marriage of the first Hungarian king, St. Stephen, to a Bavarian princess were followed by the influx of a large number of German knights and the introduction of German (Frankish) institutions. The king before legislating was now required to ask the advice of his council (*senatus*), consisting of the *principes regni*, but he was free to act as he pleased. The statute of 1291 (sect. xxxi) already speaks of the custom of the barons and noblemen to assemble annually. The influence of this body gradually increased as a result of the occasional youth or weakness of the king and especially as a result of the necessity of electing a new king whenever the king died without a natural heir. The nobility, both higher and lower, originally sat together as one house; but the statute of 1608 (*post coronationem*, sect. i) brought about a separation into two houses: the Chamber of Magnates, comprising the higher nobility and the

clergy, and the Chamber of Deputies, comprising chiefly delegates of the nobility from the several counties and delegates from the royal free cities.

The Diet as so constituted had very few of the attributes of a western parliament. The lower house did not represent the commons, as in England, but chiefly the lower nobility. While all bills (not merely financial bills) had to originate in the lower house, the upper house had an absolute veto power. There was no principle of ministerial responsibility, the power of the king was correspondingly great, and at times the function of the Diet was reduced to the registering of royal decrees.

In 1848 through the introduction of a responsible ministry and the enlargement of the electoral base of the lower house the Diet was transformed into an institution resembling a modern parliament. Ministers could be impeached by the lower house and tried in the upper house, and the right of interpellation was granted to both houses. By custom an adverse vote in the lower house required the dissolution of the ministry. Although the veto of the upper house was legally absolute, by custom the power over money bills tended to rest in the lower house, the magnates seldom voicing their opposition more than once to a financial measure which the lower house persisted in passing. The power of the monarch although diminished continued very strong. The government was required by custom to consult the king before proposing measures to the Diet and his final veto power was always more than a mere formality. Through the compromise of 1867 with Austria the conduct of foreign affairs, army and finances for the joint affairs of the dual monarchy were reserved to special joint ministers responsible to two delegations elected respectively by the Austrian and Hungarian parliaments.

Although the electoral base of the Chamber of Deputies was increased in 1848 from 200,000 voters to 800,000, even the higher number represented only 7 percent of the population. The proportion of voters to population decreased slightly during the seventy years ending in 1918, and the Chamber of Deputies thus remained essentially an assembly of the nobility. With the coming of the twentieth century there were to be sure more deputies of non-noble birth, but even these newer elements—industrial and financial capitalism and the higher bureaucracy—readily followed the guidance of the nobility. The composition of the Chamber of Magnates,

on the other hand, was altered scarcely at all after the seventeenth century, the only important change being the act of 1885 providing for the appointment of a certain number of life members by the king and for the exclusion of magnates whose land tax was less than 3000 florins (about \$1200). On the whole it may be said that during the entire reign of the Hapsburgs the Hungarian Diet served as a fighting organ of the landowning nobility, directed on the one hand against the absolutism of the dynasty and on the other against the rising lower classes—the minority nationalities, the peasantry and the industrial laborers.

After the World War the republican Karolyi government projected a unicameral legislature with a greatly extended franchise, but the regime was overthrown before any elections could be held. The succeeding Soviet government held sham general elections for a National Congress of Soviets. But with the collapse of communist rule the pre-war constitutional regime was restored (except that a regent occupied the place of a Hapsburg monarch) through the agency of a National Assembly convoked in 1920 on the basis of a fairly general and secret ballot. A Second National Assembly, convoked on a more limited ballot, laid down the electoral regulations for the present legislature. Despite the fact that the National Assembly had functioned *de facto* as a unicameral legislature, it was voted to restore both houses in the definitive regime. The reason for this step was the desire of the conservative parties to insure their rule through an extra bulwark of protection in addition to that afforded by a restricted franchise in the lower house.

The Chamber of Magnates now comprises all Hapsburgs living in Hungary (4), members elected by members of the former Chamber of Magnates (38), representatives of the churches (31), *ex officio* members (12), delegates of scientific and economic institutions (35), representatives of municipalities—counties and cities—(76), members nominated by the regent (40). The mandate of the elected members is for ten years.

The electoral base of the Chamber of Deputies now includes 58.4 percent of the whole population. Male voters must be twenty-four years old and have four years of school instruction; female voters unless university graduates must be thirty years old and have six years of school instruction or four years instruction and three or more legitimate children or be self-

sustaining and have their own household. The signature of 10 percent of the voters of a district is necessary for nomination. As the acceptance of the validity of signatures depends on the good will of the local administration as well as on the liberty of canvassing, this provision works to suppress any manifestations of independent public opinion. It accounts for the uninterrupted reign of the same government from 1922 to 1931 and for the fact that the opposition is limited to 14 Social Democrats and 9 Democrats.

Because of the resort to a regency the power of Parliament may be said to have increased somewhat under the post-war regime. The regent, who was chosen by the first National Assembly and who in the future is to be chosen by the joint assembly of the two houses of Parliament, may be impeached by the lower house and tried by a high court selected from the upper Chamber. He possesses only a limited veto. Of the two houses the lower house continues as before the war to be the more influential. Special powers have been granted to the Chamber of Deputies to override the veto of the Chamber of Magnates in regard to money bills. As in England the power of the legislature as a whole is not restricted by any written constitution, the constitutional provisions not differing from other legislative acts and all acts requiring a simple majority for passage. The development of detailed legislative procedure and standing orders, as formulated December 19, 1928, has been mainly along Franco-Belgian lines.

The prestige of the legislature has always been considerable. Members enjoy high social standing as well as great advantages before administrative authorities. During the First and Second National Assemblies (1920–26), when the wealthier peasantry and the lower middle class generally made considerable inroads, this prestige declined somewhat. But as these elements have since been very much reduced, the Chamber of Deputies is now again, although in lesser degree, the assembly of "gentlemen" which it was before the war. Out of 245 members there are 29 counts and barons and about 100 belong to the untitled nobility. The industrial laborers of Budapest have their representatives in the legislature, but the great masses in the country, particularly the peasants and the laborers, are scarcely represented, because of the prevalence of the open ballot, the electoral procedure and the interference of the administration at elections.

ROBERT BRAUN

SPAIN AND PORTUGAL. *Spain.* In mediaeval times a cortes, or assembly of states, existed in each of the large political entities of the peninsula under Christian control; such assemblies continued to exist when aggregation around the crowns of Castile and Aragon produced general cortes for these realms. In Castile, however, the regional assemblies disappeared in the second half of the fourteenth century, while the general cortes of the crown of Aragon met only on extraordinary occasions to treat questions of interest to all the component states. Aragonese expansion resulted in the establishment of a cortes in Sardinia and in the introduction of Aragonese features into the Sicilian parliament. The origins of the Cortes have not been satisfactorily determined. More or less plausible but unproved is the hypothesis whereby it is derived from the full or extraordinary sessions of the Curia Regia, a consultative body possessing in fact many functions of secular and ecclesiastical government, which existed in León in the early centuries of the reconquest and later acquired feudal characteristics. The classical theory derives the Cortes ultimately from the late Visigothic councils of Toledo, which were attended by the highest church officials and by high dignitaries of the state, who were at the same time outstanding members of the nobility; their specific function was ecclesiastical, although the king might submit secular affairs to them for deliberation. Such fundamental differences of composition and function, however, exist between council and Cortes as to make this theory inadmissible. Although the cortes were attended by the higher nobility and higher clergy, the essential element in their composition consisted of procurators representing the cities and towns under the rule of imperative mandate; in Castile frequently they alone were summoned. The powers and functions of the cortes varied with the place and the time. In judicial theory they were merely consultative and deliberative organs unable to limit the power of the king, except that it was their prerogative to vote taxes and approve financial subsidies sought by the crown. The latter were the chief and characteristic functions of the Castilian cortes. In actual fact, although the Aragonese assemblies were the more powerful, the cortes in both realms intervened in questions of succession to the throne, the regency, legislation, internal administration and foreign policy, particularly during the thirteenth and fourteenth centuries. In Aragon originated a feature which spread widely and which has

modern parallels, the *diputación*, or committee, chosen from the various estates to keep watch over the king between sessions and to enforce obedience to the laws.

In the first half of the fourteenth century began the decline of municipal autonomy, aided by the jurists' adoption of the absolutist principles of the Roman law and by the crown's corruption of the elections of the procurators. Consequently the prestige of the cortes waned; they met less frequently and the scope of their competency was restricted. From the time of Ferdinand and Isabella they virtually ceased to exist as a functioning organ of government and from the time of Charles I and Philip II they met only on very exceptional occasions and seldom intervened in important problems. The legal situation, however, remained unchanged. In the eighteenth century local revolts and Bourbon centralization led to the suppression of the regional cortes and the establishment of a single body for Spain, but in Navarre the cortes survived until the early years of the nineteenth century.

Although the introduction of the constitutional regime at the beginning of the nineteenth century revived the Cortes, its spirit, organization and functions were radically changed. While its composition in certain respects resembled that of previous assemblies, the Cortes of Cadiz, meeting as the representative body of a nation which had assumed the sovereignty in its revolt against Napoleonic imperialism, in 1812 promulgated a constitution modeled largely upon the French constitution of 1791. The new constitution established the principle of separation of powers and vested the legislative power in a unicameral parliament. The restoration of Ferdinand VII marked the beginning of a stormy period for the new Cortes, which succumbed repeatedly to the bad faith of the monarchs, who were supported by an ignorant population. Its structure and powers were frequently affected by the vicissitudes of struggles between parties supported only by sections of the army and by certain other minorities. In 1834 a royal statute replaced the constitutional Cortes with two *estamentos*, or estates, possessing hardly any power except the right to petition the absolute monarch. The reintroduction of the modern Cortes as a bicameral body in 1837 was followed by a struggle—the effects of which are displayed in the constitutions of 1845 and 1869—over the composition of the Senate. Under the last monarchist constitution, that of 1876, the issue be-

tween king and parliament was never really settled; but a compromise with respect to the Senate was reached by providing for members who were either to be so in their own right or to be chosen by the king for life as well as for members elected by universities, academies, societies for the furtherance of economic development, ecclesiastical corporations and provincial authorities and by electors chosen by local government officials and the higher taxpayers. For the directly elected Congress of Deputies universal manhood suffrage was not adopted until 1890. In the Cortes of Cadiz representatives sat for the American colonies. After the loss of the bulk of the latter the Antillean territories maintained their representation, although not consistently; but they seldom affected legislation. Until 1918 the committee organization of the two chambers was modeled upon that existing at one time in France: the chambers were divided by lot into sections which gave bills preliminary readings and then, if they favored further consideration, elected a representative to a special committee to report on the particular measure. Elected generally in the same manner were a committee of the budget and several other permanent committees not concerned with subjects of legislation. In 1918, however, also in accordance with French developments a full set of permanent committees to deal with legislative measures was organized, largely on the principle of one for each ministry. In the Congress they were elected by the sections and in the Senate by the whole house.

Except for the requirement that bills regarding taxation and public credit be first presented to the Congress, the powers of the two chambers to legislate and to represent the nation before the monarchy were equal. The Congress was empowered to bring criminal prosecutions against ministers before the Senate acting as a court; only in this case could one chamber, the Senate, be convoked without the other. Political control over the ministry rested on extraconstitutional conventions; but no effective control or supervision was maintained, for two great prodynasty parties of very similar composition held the reins of government by turn on the basis of majorities obtained fraudulently through the Ministry of the Interior. The consequent inability of the lower middle class, the urban proletariat and other groups to obtain adequate representation and the antipolitical views of strongly organized syndicalist workmen together with the internal disintegration of the controlling parties and the

reactionary character of the Senate led to the political indifference of the great mass of the nation, including the intellectual minority, and to the loss of prestige of the Cortes. All these circumstances, reenforced by the absolutist tendencies of the crown and the gross interference of the army in civil affairs after it had assumed a position of independence with respect to parliament quite similar to that of the military forces in Japan, facilitated the establishment of the dictatorship of General Primo de Rivera in 1923. It is to be noted that one of the objects of the latter was the suppression of the campaign tenaciously maintained by the socialist and republican minorities in parliament to fix responsibility for the military disaster in Morocco in 1921.

Upon the downfall of the monarchy in April, 1931, the provisional government summoned a Constituent Cortes; this body elaborated a republican constitution, which was promulgated in December, 1931. The Cortes was dominated by republicans and socialists and contained but few members of previous parliaments. It was elected by universal, direct suffrage from multiple member constituencies provincial in scope, replacing what had been for the most part a system of small single member districts. The great cities elected their own representatives independently in proportion to their population. The attributes and powers vested in the Cortes by the new constitution are based upon national experience as well as upon post-war developments abroad. Unicameralism has been adopted. Members are elected for four years; women and the clergy, the latter having hitherto been barred from the lower house, are now eligible.

Out of the failure of the constitution of 1876 to provide for its own revision or to determine clearly in what political organs the ultimate power lay arose the question, which was prominent immediately before the fall of the monarchy, whether the amending power belonged to the simple legislative process or to a constituent cortes with or without the king. The new constitution provides for the proposal of amendments by the Cortes and the election of a constituent cortes, which shall decide on them and which shall subsequently be transformed into an ordinary legislative assembly. The legislative power of the Cortes is further affected by the incorporation of international agreements into constitutional law, by the powers which the Cortes is authorized to grant to autonomous regions and by the rights, with some restrictions,

of initiative and referendum. In certain matters, notably the amendment of the budget and votes of confidence, the Cortes may take action only by absolute or larger majorities, while on the latter question procedure is regulated in order to provide sufficient time for thoughtful deliberation. On the other hand, parliamentary control in certain respects is very pronounced. A permanent *diputación* will act as a check on the executive; the Court of Audit (*Tribunal de Cuentas de la República*) depends directly upon the Cortes. The latter may bring criminal prosecutions against the president and the ministers before a special court of constitutional guarantees; and automatic expedients familiar elsewhere have been adopted in order to place before the voters conflicts between parliament and the president, in whose election the Cortes participates.

Under the old regime the ineffectiveness of the parliamentary system and a growing recognition of the significance of education led to the establishment of several more or less autonomous organizations authorized to investigate, prepare legislation and carry out the administration within their fields. The new constitution, displaying a similar respect for expert opinion and assistance in the drafting of legislation, contemplates the establishment of advisory bodies for both executive and legislative branches; the preparation of legislation is declared a highly important function of the ministry, and the president of the Supreme Court and the attorney general are *ex officio* members of the parliamentary Committee on Justice. The Declaration of Geneva (*Declaration des droits de l'enfant*, 1924) is accepted as normative. By empowering the Cortes to delegate to the ministry the function of elaborating the details of a good deal of the legislation which it may enact the authors of the constitution contemplate that the legislative action of parliament will be largely of a comparatively general, policy determining character.

The home rule aspirations of certain regions—Catalonia, the Basque Provinces and Galicia—presage the early establishment of regional assemblies, whose nature and functions cannot yet be ascertained.

Portugal. From mediaeval times until quite recently the history of the popular assembly in Portugal has coincided in the main with its history in the rest of the peninsula. The Cortes did not meet at all in the eighteenth century. A Constituent Cortes established the modern regime with the constitution of 1822, which like

its model, the Spanish constitution of 1812, was idealistic in character and incompatible with the milieu; its career was ephemeral. In 1826 King Pedro IV proclaimed a constitution establishing a moderately liberal parliamentary government on the British pattern. The legislative power was vested in a lower house elected by indirect, limited suffrage and an upper house, or Senate, similar in form to that ultimately adopted in Spain. Against this system were ranged the absolutists led by the infante Miguel, who summoned a Cortes after the ancient manner and had himself proclaimed absolute monarch. After a long period of bitter strife the constitution prevailed and remained in force with occasional liberalizations until the royal dictatorship, which was the culmination of the corrupt rotation in office of the prodynasty parties, brought about the fall of the monarchy. The republican constitution of 1911 entrusted the legislative power to a lower and an upper house, both elected by direct manhood suffrage. Besides the purely legislative function the Cortes possessed certain other powers, especially with respect to administrative and judicial organization. It elected the president of the republic, who had no veto power and whom it could remove; although the constitution did not expressly provide that ministers were responsible to the legislature, they were in fact under its control. Initiation of discussion on many matters was the prerogative of the lower house. Although the colonies were represented in both houses, the upper house was empowered to approve or to reject the nomination of important officials for the overseas possessions. To settle conflicts between the two houses joint sessions were provided. The republican parliament, however, was unable to cope with the problems before it, and a long series of revolts culminated in the establishment in 1926 of a military dictatorship which suspended the constitution.

JOSÉ OTS Y CAPDEQUI

JAPAN. Although the origins of the Japanese parliament, or Diet, go back to the overthrow of the Tokugawa shogunate in 1867, it was not until 1889, when the emperor granted the people a constitution, that the national legislative assembly was established in its present form.

The conservative forces of the empire offered strong resistance to any advanced steps toward democracy, and the framers of the new constitution made progress only with great difficulty. From this conflict there resulted a series of com-

promises which seriously cripple the power of the Diet by reserving certain important prerogatives to the emperor. The emperor, with the Privy Council as advisory body, was given control over general matters of diplomacy, such as the declaration of war and peace and the conclusion of treaties; he was vested with supreme command of the army and navy, including the determination of their organization and peacetime standing as well as the power to make laws in times of urgent necessity without consulting the Diet. Furthermore the Diet's power over the budget was curtailed by a regulation providing that if the Diet failed to pass a budget that of the previous year was to be considered in force. Two additional factors further curtail the power of the Diet: the shortness of its sessions—it meets for only three months in the year—and the strong bureaucracy built up by Japan's strict civil service laws. The greatest weakness of the Diet lies in its almost complete lack of control over the military branches of the government, around which cling all the surviving forces of the old order and over which its only effective control is the power of studying and passing the budget; its investigation into the activities of the army and navy during the course of debate over the budget tends somewhat to exercise a restraining influence upon them.

In theory the cabinet is responsible to the emperor alone. In the days following the granting of the constitution the leaders of the government were recruited from among the elder statesmen of the Satsuma and Choshu clans, who ruled regardless of the Diet, which functioned chiefly as a forum for criticism. When the first parties were formed the Diet began to use what power it had, principally its right of passing the budget. Party attacks on cabinets headed by the elder statesmen increased in strength until in 1898 the ministers, unable to secure a complaisant Diet, suddenly called on the party leaders to form a government. Party and non-party governments then alternated until 1925, when the last non-party government resigned. Since that date, although the theory of responsibility to the emperor has not been changed, in actual practise the cabinet has been held responsible to the Diet; and particularly since the passing of the universal manhood suffrage law in 1925 the life of a cabinet depends chiefly on the support which it can summon from the majority of the members of the lower House.

In the governmental scheme the Diet occupies a peculiar position without exact counter-

part in any other country. Sovereignty in Japan is vested legally in the emperor, not in the people. The Diet is therefore not the lawmaking body, as this function is reserved to the emperor, although "with the consent of the imperial Diet." Any law passed by the Diet must be promulgated by the emperor before it comes into effect. No emperor has ever failed to sanction a law so passed, but this is less because of imperial subservience to the public will than because the preferred position given to government bills before the Diet makes it difficult, almost impossible, for any measure not sponsored by the government to be passed.

The two houses of the Japanese Diet possess the same organization. Contrary to the western custom they do not regulate their own interior organization, which is provided for in a law promulgated by the emperor. Nor do they select their own president and vice presidents; these officers are appointed by the emperor, who must, however, in the case of the House of Representatives, choose from three candidates elected by the House.

The two houses are organized on the committee system. In addition to the Committee of the Whole into which each House can resolve itself there are standing committees on the budget, accounts, petitions, discipline and the like and special committees instituted as the need arises; all committees are elected by the houses.

The members of the Diet possess the constitutional immunities common to countries with a parliamentary form of government. They are not held responsible outside the chamber for their voice or vote within it, and they cannot be arrested during the sessions except in certain special instances.

Laws introduced into the Diet undergo three readings: the first in special committee, the second in the Committee of the Whole (with general debate and the offering of amendments), the third for the final vote. Debate is free and subject to little restriction; the vote is public. While sessions of the Diet are generally open they can be made secret either by vote of the houses or at the request of the government.

In addition to its power over legislation and finance the Diet has other means for supervising the executive. Each House may present addresses directly to the emperor. This power, used to impeach the cabinet when that body was not responsible to the Diet, now has little significance; nor is there much more in the power of each House to make representations to

the government on any subject, since these refer only to future policy and are not binding. Both houses may also pass resolutions, including those of "no confidence." Since these usually lead to the resignation of the government, this power is exercised primarily by the lower House. The Diet may make inquiries into affairs of state; but as it has no power to compel the appearance of witnesses, this prerogative is not as important as it is, for instance, in the United States. Lastly, members of the Diet may question or interpellate the government on all matters within its responsibility. This power plays an important part in Japanese legislation.

The powers of the two houses of the Diet are theoretically equal, but the House of Peers is in some respects in a stronger position, chiefly because it is not subject to dissolution. The prestige of the lower House has, however, increased so greatly in recent years as to more than offset this advantage of position and make it actually the dominant chamber. Until some ten years ago the personnel of the upper House was of generally superior quality, but with the shift of the power of government to the House of Representatives the latter has attracted some strong figures. Because, however, of the corruption which still characterizes elections the average quality of the members has not improved markedly.

With the spread of education, which has reduced illiteracy to less than 6 percent of the whole population, the corresponding rise of the power of the press, the political emancipation of all the male population of the country and the betterment of the economic condition of the common people due to the rapid industrial revolution the prestige of the Diet has risen steadily. But the strength of the political parties and in consequence the effectiveness of the Diet have been weakened by the abnormally large amounts of money which the parties spend for election and which compel them to seek alliance with the capitalist element of the country, thus leading to much corruption. This factor has made the steady progress of democracy difficult and has tended to diminish the efficiency of party government in Japan.

YUSUKE TSURUMI

See: GOVERNMENT; PARTIES, POLITICAL; LEGISLATION; SEPARATION OF POWERS; CABINET GOVERNMENT; CONGRESSIONAL GOVERNMENT; DEMOCRACY; REPRESENTATION; PROPORTIONAL REPRESENTATION; FUNCTIONAL REPRESENTATION; DICTATORSHIP; BICAMERAL SYSTEM; COMMITTEES, LEGISLATIVE; CAUCUS; BLOC, PARLIAMENTARY; COALITION; DEADLOCK; LOBBY; PROCEDURE,

PARLIAMENTARY; DEBATE, PARLIAMENTARY; OBSTRUCTION, PARLIAMENTARY; CLOSURE; INVESTIGATIONS, GOVERNMENTAL; INTERPELLATION; IMPEACHMENT; IMMUNITY, POLITICAL; ELECTIONS; CONTESTED ELECTIONS; BY-ELECTIONS; APPORTIONMENT; GERRYMANDERING; GOVERNMENT PUBLICATIONS; FRANKING.

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LEGITIMATION. See ILLEGITIMACY.

LE GRAND, DANIEL (1783-1859), Swiss-French social reformer. Le Grand was one of the earliest advocates of international labor legislation. The friendship of his father, a silk ribbon manufacturer, with Pestalozzi and Oberlin early called his attention to the degenerating influences brought about by the industrial revolution

on the working class. As early as 1832 he advocated Sunday rest as well as the income tax; a few years later he advocated child labor legislation, the prohibition of night work for women, shorter working hours for all workers and state subsidies for crèches. The Prussian legislation of 1839, based upon the British legislation of 1833, embodied his proposals. This inspired Le Grand to issue appeals to the governments of Europe in the hope of creating a system of continental labor legislation in order to overcome the competition of low standard nations—a program also implicit in Adolphe Blanqui's proposals. His appeals stressed the physical crippling of the working population, its moral decline and the destruction of family life by unlimited overtime as well as the resultant overproduction and crises; he proposed international legislation providing for a twelve-hour day for factory workers, prohibition of night work, limitation of overtime and a six-day working week, with the understanding moreover that higher standards of national legislation were not to be endangered. His appeals influenced both the British and Prussian governments but were met with evasive proposals by the government of Napoleon III. Le Grand's writings were rediscovered in 1875 by Thiersch, who reprinted them in his book, *Über den christlichen Staat* (Basel 1875). His ideas were incorporated in all subsequent efforts to forward labor legislation, and their influence was acknowledged at the Washington Labor Conference in 1919.

STEPHEN BAUER

Consult: Bauer, Stephan, "Die geschichtlichen Motive des internationalen Arbeiterschutzes" in *Vierteljahrsschrift für Sozial- und Wirtschaftsgeschichte*, vol. i (1903) 79-104; Weiss, Raymond, *Un précurseur de la législation internationale du travail: Daniel Le Grand* (Paris 1926).

LEHFELDT, ROBERT ALFRED (1868-1927), South African economist. Lehfeldt was born in Birmingham and studied at Cambridge and London universities. He was for a number of years professor of physics at East London College and at the South African School of Mines and Technology (now the University of the Witwatersrand) in Johannesburg. In the course of time he developed a keen interest in economic problems and in 1916 accepted the new chair of economics at the University of the Witwatersrand.

Lehfeldt brought to the study of economics a profound knowledge of mathematics and a remarkable aptitude for quantitative treatment of economic problems. He attracted international

attention by his plan of currency stabilization through the control of the supply of gold rather than of the demand for it. It called for the establishment of an international commission which would purchase all important gold mines and regulate the value of gold by restricting output in times of rising prices and increasing it in times of falling prices. He was the first to estimate the union's national income and he offered valuable testimony before a number of government commissions in South Africa, particularly before the Kemmerer and Vissering Commission on the resumption of gold payments by the Union of South Africa. Lehfeldt was one of South Africa's outstanding economists and exercised considerable influence in stimulating quantitative economic research in the union.

S. HERBERT FRANKEL

Important works: *Gold, Prices and the Witwatersrand* (London 1919); *Restoration of the World's Currencies* (London 1923); *The National Resources of South Africa* (Johannesburg 1922); Union of South Africa, Finance Department, *Report . . . on the Resumption of Gold Payments* (Pretoria 1925) p. 439-64; "Public Loans and the Modern Theory of Interest" in *Economic Journal*, vol. xxii (1912) 16-33; "The Rate of Interest on British and Foreign Investments" in *Royal Statistical Society, Journal*, vol. lxxvi (1912-13) 196-207, 415-16, and vol. lxxvii (1913-14) 432-35.

LEHR, JULIUS (1845-94), German economist. Lehr completed his studies in forestry at the University of Giessen and became *Privatdozent* at the Forstliche Hochschule at Münden. From 1874 he was professor of economics at the Technische Hochschule in Karlsruhe and from 1885 professor of forest policy and forest history at the University of Munich. Even during his early training in the field of forestry Lehr was particularly interested in its economic aspects.

In economics Lehr's most important works are: *Grundbegriffe und Grundlagen der Volkswirtschaft* (Leipzig 1893; published as pt. i, vol. i in Frankenstein's *Hand- und Lehrbuch der Staatswissenschaften*) and *Politische Ökonomie in gedrängter Fassung* (Munich 1892; 4th ed. by C. Neuburg, 1905). Minor publications dealt with currency and tariff problems. Lehr was one of the few followers of the Austrian school in Germany and attempted to apply the mathematical method to the marginal analysis of price and wage problems but with little success. He was, however, more effective in the application of the mathematical method to forestry economics. His essay "Forstpolitik" in T. Lorey's *Handbuch der Forstwissenschaft* (2 vols., Tübingen 1887-88; 3rd ed., 4 vols., 1912-13, vol. iv,

p. 91-287) was the first comprehensive work on the subject and stimulated later writers in this field. He defended the viewpoint that the utilization of forests be left to private enterprise, although he urged compulsory reforestation of those woodlands which are definitely suitable only for growth of timber. A student of Gustav Heyer, he advocated the cultivation of forestry statics (a discipline dealing with the ascertainment of the value of the forest produce), to which he made significant contributions. Besides numerous articles in the *Allgemeine Forst- und Jagdzeitung*, of which he was coeditor, he wrote the masterly treatise "Waldwertrechnung und Statistik" for Lorey's *Handbuch*, published separately as *Beiträge zur Statistik der Preise, insbesondere des Geldes und des Holzes* (Frankfurt 1885), in which he made important contributions also to the methodology of index numbers.

MAX ENDRES

Consult: Weber, R., in *Zeitschrift für Forst- und Jagdwesen*, vol. xxvi (1894) 728-31.

LEIB, JOHANN GEORGE (1670-1727), German cameralist. Leib, who was trained as a jurist, was in 1710 appointed royal Polish and electoral Saxon councilor and *Referendar* and in 1716 councilor of commerce. He was a typical representative of the German cameralists, who adopted and cultivated the doctrines of the Austrian cameralists. His cameralistic approach was evident in his treatise *Von Verbesserung Land und Leuten, und wie ein Regent seine Macht und Ansehen erheben könne, zerfällt in 4 Proben* (Frankfurt 1708), in which he claimed that to increase his own well being, power and prestige a sovereign must be concerned primarily with the welfare of his subjects. A typical mercantilist, he stated as a basic rule that money must remain in the country. The country should be populated not merely by many but by useful men. The subjects not only should support themselves through their industry but should also draw money into the country. For the stimulation of production he recommended the creation of an "academy of manufacturing," and for the support of trade the founding of trading companies and a note and deposit bank (*Giro- und Lehnbank*). He considered the excise the most just tax and warned against every deterioration of the coinage. Although national considerations were at the basis of his economic views, he was not unfamiliar with international economic problems. He pointed out the advantages of oversea trade and recommended for its

encouragement the establishment of an Asiatic and African trading company. He considered that a favorable balance of trade, however, was absolutely necessary for the prosperity of the state. Like the Austrian cameralists, Leib attacked French attempts to achieve political and economic supremacy.

KURT ZIELENZIGER

Important works: *Des grossen Kayzers Caroli V. Regier-Kunst, oder väterliche Instruction, wie sein Sohn Philippus II., König in Spanien, wohl und glücklich regieren sollen* (Leipsic 1714); *Abfertigung des Unfugs der neuen Bibliothec oder Nachrichten und Urtheile von neuen Büchern, wegen Caroli V. Regierkunst* (Leipsic 1716).

Consult: Zielenziger, Kurt, *Die alten deutschen Kameeralisten*, Beiträge zur Geschichte der Nationalökonomie, no. 2 (Jena 1914) p. 372-90.

LEIBNIZ, FREIHERR VON, GOTTFRIED WILHELM (1646-1716), German philosopher, scientist and statesman. Leibniz was the last European thinker to master the whole of knowledge. His intellectual activity extended to philosophy, mathematics, natural science, theology, history, politics, jurisprudence and philology, and in addition he was a practical statesman engaged in prodigious plans for furthering the peace of Europe and the interests of the German empire.

The significance of Leibniz' philosophy for the intellectual history of Europe in the seventeenth and eighteenth centuries consists in the fact that he gave the clearest and keenest systematic expression to the fundamental problem of the relationship between world and individual, between macrocosm and microcosm, and endeavored to solve it by new intellectual methods. According to Leibniz individual and universe are not antitheses nor do they bear to each other the relation of a single part to a purely quantitative whole consisting of a number of parts. Individual and universe are rather related qualitatively; the universe can be conceived only in the form of individuality and individuality can be determined and defined in its essence only in its relationship with the universe. This concept forms the starting point of Leibniz' theory of monads and his system of monadology. In this system every individual "I," every monad, implies the totality of the world—not in the sense of actually comprising it but in the sense of ideally representing it. Thus there results in contrast with Spinoza's monism a strongly pluralistic view of the world. Each individual being represents the universe of phenomena; but

each apprehends it from a different point of view and thus gives to the representation a particular distinctness and a unique stamp. These particular eternally differentiated "perspectives" of the universe are, however, bound to one another by a common fundamental law which governs them all.

Along with the principle of the monad goes as its necessary complement and fulfilment the principle of preestablished harmony. It states that from monad to monad no direct interaction, no *influxus physicus*, takes place, but that it is in the fundamental nature of every individual being to develop purely from its own principles a definite set of perceptions, which stands in the closest connection with the perceptive sets of other subjects. All these sets thus form one single set, in that in all of them, however much they may differ from one another, the same order is expressed, the same amenability of the universe to law. The metaphysical foundation for this unity is found according to Leibniz in the unity of their source; for since they all issue from the highest monad, God, His Being is expressed in every one of them, although in varying degrees of distinctness and, as it were, in varying outline.

The ethical and social doctrines of Leibniz are based on the concept of natural law. Natural law provides for him stable and changeless standards of morals, which possess the character of eternal truths and are capable of a firm a priori deduction. First and foremost among the basic moral standards is the freedom of the individual and his right to intellectual and moral improvement. These basic privileges must in no way be encroached upon or limited by positive regulations. In the development of these ideas Leibniz followed theological models, especially the Augustinian concept of the *Civitas Dei*, but his fundamental tendency is directed to secularizing this concept; i.e. releasing it from all specific supernatural ideas and basing it purely on the *lumen naturale*, on unmistakably evident rational examination. All "rational souls" are entitled to equal privileges, for each belongs to the great "republic of spirits" at whose head stands God. For the building up of the state and of society there follows therefore the postulate that in them too the individual must never be considered as a mere part which under certain circumstances must be sacrificed to the whole. Rather each individual subject as a free personality within the unity of the state and of society preserves his own privileges. No mere authoritative decree, no mere positive legal ordinance,

must encroach upon this natural right; for above the positive law, the *jus strictum*, stands the higher moral law, the law of equity, *jus aequitatis*. On similar grounds Leibniz attacked the institution of slavery, maintaining that the right of possession could apply only to things not to persons. With these principles Leibniz helped to create the philosophical foundation of the doctrine of the "inalienable rights of man" and to prepare the ground for the development which this doctrine was to receive in the period of the Enlightenment.

In the field of practical politics Leibniz planned far reaching schemes which were primarily designed to protect the equilibrium of Europe and the independence of the German empire against the advance of France. Leibniz sought to meet the danger of Louis XIV's plans of conquest by proposals for the reform of the German imperial administration, which sought to achieve a more closely knit coordination of the forces of the empire, and by a policy of union against France. Leibniz also outlined a plan for an expedition to Egypt, which he placed before Louis XIV with a view to diverting him through a campaign against the Turks from his plans of European conquest. In the field of ecclesiastical policy his chief aspiration was the reestablishment of ecclesiastical unity in the Christian world. His negotiations with the leading representatives of Catholicism, especially with Bossuet, were wrecked by the stand taken by the latter, who demanded as a condition of ecclesiastical unity the unreserved approbation by the Protestants of the decisions of the Council of Trent. Leibniz then endeavored to bring about the union of the Lutheran and Reformed churches. Here too his plans were never realized.

Along with questions of domestic and ecclesiastical politics Leibniz occupied himself unceasingly and tirelessly with that of the organization of science and learning. The later organized Berlin Akademie der Wissenschaften was founded essentially after his plans; it developed out of the Societät der Wissenschaften of Berlin, which Leibniz headed in 1700. Leibniz also outlined extensive plans for the founding of learned societies in Dresden, St. Petersburg and Vienna.

In all his many sided practical activity the general trend of Leibniz' basic theoretical ideas, the concepts of the monad and preestablished harmony, is unmistakable. The true concept of unity is not opposed to that of multiplicity; rather it implies multiplicity and seeks to be its intellectual expression. Even his attempts at the

organization of science and his pedagogical interests express a principle derived from his theoretical system. Although all individuals, or monads, are necessarily different, this difference cannot lie in the perceptual content of each monad—since every subject, according to his special view, represents the whole of the world—but is to be found in the method of representation, in the varying degrees of clearness and distinctness with which the universe is represented in the various subjects. The higher monads are differentiated from the lower by the fact that they are capable of a higher degree of clarity and distinctness in their ideas. Hence the aim of intellectual and moral progress is to seek an ever clearer view of the entire physical and moral world and an ever sharper differentiation of the principles underlying them.

With such ideas, which unmistakably spring from the primary premises of his doctrine, Leibniz set up a theoretical and moral program which had a decided effect on posterity and with which he became the true originator and founder of the philosophy of the Enlightenment.

ERNST CASSIRER

Works: The most complete edition of Leibniz' works in regard to history and political science is that edited by Onno Klopp, 11 vols. (Hanover 1864-84). The Preussische Akademie der Wissenschaften is now preparing a new complete edition in 40 volumes (of which five have already appeared, Darmstadt 1923-31), which will be particularly valuable for Leibniz' correspondence. The most important philosophical works of Leibniz have been translated into English by R. Latta in *The Monadology and Other Philosophical Writings* (Oxford 1898).

Consult: Guhrauer, G. E., *Gottfried Wilhelm Freiherr von Leibniz*, 2 vols. (Breslau 1846); Fischer, Kuno, "Gottfried Wilhelm Leibniz, Leben, Werke und Lehre" in his *Geschichte der neueren Philosophie*, vol. iii (4th ed. Heidelberg 1902); Russell, Bertrand, *A Critical Exposition of the Philosophy of Leibniz* (Cambridge, Eng. 1900); Couturat, Louis, *La logique de Leibniz d'après des documents inédits* (Paris 1901); Cassirer, Ernst, *Leibniz System in seinen wissenschaftlichen Grundlagen* (Marburg 1902); Schmalenbach, Herman, *Leibniz* (Munich 1921); Carr, H. W., *Leibniz* (Boston 1929); Biedermann, Karl, *Deutschland im achtzehnten Jahrhundert*, 2 vols. (Leipzig 1854-80) vol. ii, pt. i, ch. v; Troeltsch, Ernst, "Leibniz und die Anfänge der Pietismus" in his *Gesammelte Schriften*, ed. by Hans Baron, vol. iv (Tübingen 1925) p. 488-531; Dilthey, W., "Leibniz und sein Zeitalter" in his *Gesammelte Schriften*, vol. iii (Leipzig 1927) p. 1-80; Pfeiderer, Edmund, *Gottfried Wilhelm Leibniz als Patriot, Staatsmann und Bildungsträger* (Leipzig 1870); Ward, A. W., *Leibniz as a Politician*, Manchester University, Lectures, no. xii (Manchester 1911); Ruck, Erwin, *Die leibnizsche Staatsidee* (Tübingen 1909); Barillari, M., "La dottrina del diritto di Goffredo Guglielmo Leibniz" in R. Accademia di Scienze Morali e Politiche,

Atti, vol. xliii, pt. ii (Naples 1915) p. 1-186; Baruzi, Jean, *Leibniz et l'organisation religieuse de la terre* (Paris 1907); Jordan, G. J., *The Reunion of the Churches, a Study of G. W. Leibnitz and His Great Attempt* (London 1927); Kröger, A., *Leibniz als Pädagog* (Leipzig 1900); Daville, L., *Leibniz historien* (Paris 1909).

LEIST, BURKARD WILHELM (1819-1906), German jurist. Leist was successively professor at Basel, Rostock and Jena, where he died after a long illness. Because of his marked personal peculiarities it is difficult to associate him with any school. He began his career with strictly Romanistic studies and his *Die bonorum possessio, ihre geschichtliche Entwicklung und heutige Geltung* (2 vols., Göttingen 1844-48) still belongs in method to the old historical school. In addition to history Leist began to pursue systematic analytical researches, which he published as *Civilistische Studien auf dem Gebiete dogmatischer Analyse* (4 vols., Jena 1854-77). An even more important work of this character was his continuation of Glück's celebrated commentary on the Pandects, *Ausführliche Erläuterung der Pandecten*. In his treatment of the Roman law Leist set himself against its wholesale reception and demanded the abandonment of such of its institutions as had no practical value in modern life. In the 1880's, however, he began definitely to follow a bent which set him apart from the Romanists of his time. In the *Civilistische Studien* he had refined upon the dogma of the historical school by distinguishing two kinds of legal norms. Some were *naturalis ratio*, or given by the conditions of life, needing only the sanction of custom or legislation to become positive law, but others were *civilis ratio*, or the products of particular needs. Leist even attempted to associate this distinction with that which the Romans made between *jus gentium* and *jus civile*. To illustrate his juristic theories he followed a direction opposite to that of the Roman mediaevalists. He went back to the Aryan sources of the Roman law, and the result was a series of three great works, *Graeco-italische Rechtsgeschichte* (Jena 1884), *Alt-arisches jus gentium* (Jena 1889) and *Alt-arisches jus civile* (2 vols., Jena 1892-96), in which he brought Latin law into close relation with Indian and Greek law.

HANS FEHR

Consult: Bekker, Ernst Immanuel, "Burkard Wilhelm Leist unter seinen Aequalen" in *Zeitschrift der Savigny-Stiftung für Rechtsgeschichte, Romanistische Abteilung*, vol. xxviii (1907) 129-57; Stintzing, R. von, and Landsberg, E., *Geschichte der deutschen Rechtswissenschaft*, 3 vols. (Munich 1880-1910) vol. iii, pt. ii, p. 835-42.

LEISURE. Philosophy and the common judgment of mankind are at one in holding leisure among the chief goods of life. Although in common parlance and in general practise leisure, the opportunity for disinterested activity, tends to become confused with amusement or recreation, one means of its utilization, yet in the high evaluation generally placed on leisure there lies a confused recognition of what in philosophy becomes more explicit. "Wisdom cometh by opportunity of leisure," said the ancient prophet. For Aristotle there were three kindred ideas expressing the end of human life: theoretical wisdom, happiness and leisure. Leisure was more than the condition for the attainment of the other two; it represented the satisfaction of the truly disinterested interest, the achievement of understanding, which is man's highest goal.

For purposes of social analysis the concept is usually narrowed—and widened—to mean simply freedom from activities centering around the making of a livelihood. It is indeed a rather bitter paradox that leisure has come to have a connotation of loose relaxation and that the term leisure class carries an accent of opprobrium. Earlier periods would have been far more ready than the present to see even in certain pursuits which result in the gaining of a livelihood exercises in leisure. The artist, the scientist, the scholar, work at their art or science or research for their living; in another sense theirs is the privilege of constant leisure to devote themselves to what are for them the highest pursuits. The methods by which the artist and scholar were supported in older societies emphasized the latter aspect of their position, as the commercial payment for their services emphasizes the former aspect. One might say that the more nearly ideal the organization of society, the more perfectly would every individual's work be adapted to his abilities and the greater would be the number of people who enjoyed similar qualitative leisure through rather than outside of their work.

The very concept of leisure as contrasted with work is largely foreign to primitive societies. To every member of the community falls his share of labor and of play, his opportunity for participation in the important rites and mysteries. The orientation of life is physiologically as well as socially toward long periods of leisurely work interspersed with occasional periods of intense expenditure of energy. The separation of a priestly class marks the first step toward the development of groups privileged through the

possession of leisure. The fact that the priest's activities are regarded by the community as in the highest degree necessary to its survival in no way negates this interpretation. The social implications of the development become clearer when the priestly class multiplies beyond a point consistent with its spiritual functions and engages in governmental and scholarly pursuits. Concurrently or somewhat later the emergence of a distinct warrior class and the recognition of a difference between the pursuits of men and those of women lay the basis for the growth of other leisure classes.

The full meaning of leisure is perhaps never apparent until one portion of society is deprived of all possibility of its enjoyment. Throughout antiquity slavery and slavery alone made possible to the higher classes emancipation from the necessity for constant attention to material needs. This indeed was its justification to the Greeks. Some such justification underlies all willing and thoughtful acceptance of a leisure class. The reverence and the privilege accorded the Chinese scholar are also the result of a conviction of his social indispensability. Something of the force of the concept of leisure as it developed in antiquity is indicated by the fact that the English word *school* is derived from the Greek word for leisure (*scholē*). The philosophers were not unaware of the problem of the unprivileged, but their only solution was further insistence on freedom of the citizen from manual labor and labor for pay.

Even the artist and the sculptor were not regarded by Aristotle or Plato as leisured men, since the nature of their crafts tied them down to constant repetition of one kind of action and thus robbed them of the freeman's ability to choose his interests. The rigor of this conception has less appeal to the modern social philosopher; but it is grounded in a distinction which he too must recognize. Leisure is time at the disposal of the complete man; the man exhausted by fourteen hours of labor or eight hours under a speed up system and harassed by insecurity possesses no leisure but only time for recreation that will enable him to return again to toil.

The leisured members of society have been most often those with assured incomes not dependent on their personal efforts—landed proprietors, rentiers, holders of sinecures. Probably in every age there have been individuals who secured leisure by boldly claiming it as a necessity of existence and stripping themselves of all other requirements except those which can be

supplied by a minimum of "making-a-living" activity. Certain occupations, more frequent in pre-industrial societies than today, in themselves afford considerable leisure. The shepherd and the small proprietor in rich country, if they have little opportunity for variety in the use of leisure, have long hours of freedom, out of which have come through the centuries folk songs, folklore and dancing. The craftsman of some skill who could travel about from country to country, as in the early period of the *compagnonnage*, had many of the perquisites of leisure. Under some conditions, although decreasingly in the modern world, the sailor has had leisure. The soldier of fortune often possessed it, but the leisure of the modern military man is of a different and spurious character. It should be remembered too that throughout antiquity and the Middle Ages the normal number of holidays during the year was about 115. Except in periods of unusual economic stress even slaves enjoyed such holidays, although their means of utilization of such time were limited. But the grouping of work around numerous holidays probably resulted in more effective leisure than the one day of rest out of seven in industrial society.

Throughout history where definite leisure classes have come into existence they have been based upon wealth—whether in the form of slaves, land, securities or the rights and goods of a corporate body, such as the church. In general such classes have been the inheritors of wealth, not in any dynamic sense its makers. In periods of rapid economic change the makers of fortunes have time for nothing but fortune making and luxury spending. A leisure class may fulfil certain productive or entrepreneurial functions, as did most of the English squires and many of the Roman landed proprietors living in the smaller villas scattered throughout Italy. A landed aristocracy which has not become too affected by absenteeism ordinarily combines leisure with such productive activity. On the other hand, a class endowed with the privilege of leisure may develop for itself a great number of time consuming ritualistic functions, such as those of a military caste or of the followers of a royal court or of the society woman of the contemporary middle and upper classes, which preclude the enjoyment of any real leisure. A leisure class is not essentially a wealth worshipping or a spendthrift class. Where the possession of wealth is so taken for granted that it loses all value as a sign of personal repute, other criteria come to the fore, among them those of individual

worth and cultural fitness. But a leisure class may also take over the standards of other groups, and not infrequently throughout history leisure classes have been caught up in a whirl of luxury spending: the despots of Asia, with their fabulous riches; the landed aristocracy of Egypt, with its nominal military duties and its days of hunting and nights of feasting; the luxurious urbanites of imperial Rome; the privileged of Renaissance Italy and the court of Louis XIV. If the display consisted in many cases of artistic appreciation and civilized enjoyments, it was nevertheless on a lavish scale and in contrast to a complete lack of opportunity for the masses.

Whatever complaints might be made against the luxury of the rich, however, the desirability of leisure itself was never really brought into question throughout antiquity or the Middle Ages. With the growth of capitalism there appeared a new and condemnatory attitude. The Puritan emphasis on the moral duty of continuous industry reflected the needs of a mercantilistic and later of an industrial economy. The further disparagements of arts and amusements represented the reaction of the vigorous rising bourgeois class to the luxury and display of the older aristocracy. The "economic man" appeared in the theory of political economy. The high point was reached with Carlyle's glorification of work. The economic and moral bases of the doctrine are contained in Carlyle's bitter observation that a man with an income of £200,000 a year consumes the whole fruit of 6666 men's labor and does nothing for it but "kill partridges." Ruskin and his followers went even farther and demanded that every individual spend some time each day in manual labor. This Puritan doctrine of work with its emphasis on the seriousness of life as a business took firmer hold in the United States than in Europe, where century old traditions could not so easily be displaced. The doctrine was most effectively expressed for the United States by Benjamin Franklin in his *Advice to Young Tradesmen* and *Necessary Hints to Those That Would Be Rich*. Perhaps the effort of clearing a continent for settlement required some such emphasis on material things; but the gospel persisted past the period of its usefulness, intertwined with philosophies of activism, doctrines of progress and interest in the psychology of success.

It is one of the most striking commentaries on modern civilization that the machine, which offers the possibility of a measure of leisure for all, as slavery made possible leisure for a few,

has thus far brought only unemployment on an increasing scale, idleness for many women of the middle class and, on the other hand, extended opportunities for education and leisure to the adolescents of the community. This failure of economic organization is perhaps partly to be traced to contemporary attitudes toward work and leisure. Certainly what the normal work span of the future is to be depends partly upon technological achievement, but it depends quite as much upon the balancing of choice between increased productivity and increased leisure. The reality of such choice is most obvious in a planned economy. The problem in Russia is still largely theoretical; the existing emphasis in that country on the provision of music, drama and art represents the influence of cultural traditions which regard such things as among the necessities even in war time; but if the Soviet system does not break down, the choice between shorter hours and increased productivity will sooner or later come up in acute form. Less visibly but quite as surely all of modern society is faced with a similar choice.

Certain changes of attitude are already apparent. When the eight-hour laws were under discussion in 1916 and 1917, the prospect of such accretions of free time led governments and social reformers to talk fearfully of the leisure "problem." Temperance societies prepared for increased drunkenness and attention was centered on the real evils of commercialized recreation as it prevailed in most large cities. Concurrently with the passage of the limitation of hours legislation a number of the European governments set up official commissions to study the problem of workers' leisure activities. In 1924 the International Labor Office devoted part of its sixth conference to a discussion of the problem; in 1930 the First International Congress on Workers' Spare Time met at Liège with 300 members from eighteen countries, the governments of fourteen of which were officially represented. In the discussions of this congress and previously in those of the International Labor Office the emphasis had completely shifted from repression of commercial recreation to provision of facilities for other ways of utilizing leisure, and the conception of leisure as a problem had given way to its recognition as an opportunity and a cultural necessity.

The gains involved in the eight-hour laws were largely lost through speeding up systems and through tacit abrogation of the legislation in a period of crisis. The achievement of real

leisure for all is still a dream of the future. Nevertheless, the direction of recreational activities even under present conditions is of importance not only as indicating attitudes but because of the indirect influence on production. Without attempting to solve the problem of adequate housing for workers, the groups in Europe interested in workers' leisure increasingly insist that proper housing and city planning are essential prerequisites to socially or individually valuable utilization of leisure. Excessive urbanization and bad transportation facilities deprive the worker of much of his nominal free time; lack of space in his home throws him upon the streets and into commercialized amusements. The official leisure committees of the various European countries have encouraged and aided financially the allotment movement with its attempt to secure for every worker a small plot of ground on the outskirts of the city; they have aided the development of play fields and stadia and helped support the numerous athletic societies which have increased so rapidly since the war. They have either supported or set up choral and theatrical societies and organizations to promote folk dancing and public festivals. The great increase in free libraries since the World War has been largely due to their efforts and they have strengthened and supplemented the already existing adult education institutions. In addition the various trade union groups, the cooperative organizations and the socialist parties not only occupy a great deal of the leisure time of their members but themselves organize gymnastic societies, workers' classes and art exhibits, theatrical groups and similar projects.

In the United States the recreation movement is limited largely to adolescents, trade unionism is weak and, with a few notable exceptions, adult education is non-existent. The limited traditions of community living and the greater emphasis on the achievement of wealth as a goal have retarded the development of the idea of creative enjoyment of leisure. Nevertheless, here as well as in Europe the automobile, the moving picture and the radio have provided the means for new forms of recreation which taste and economic change might transform into the basis of real leisure.

The tone of any society is largely determined by the quality of its leisure, whether that leisure be restricted to a few or spread widely. The definite leisure classes have played varying social parts, some purely wasteful, some creative. It

may be questioned whether until very recent times the economic basis for art existed except in class inequalities. In the field of government a privileged leisure class may still have a function. The advantages of a group trained to an interest in public affairs, not in partisan affairs, cannot be lightly dismissed. The success of England in governing an empire and in making democracy work with a degree of satisfactoriness not achieved in any other country is in no small part due to the fact that it inherited from an earlier system a leisured class imbued with traditions of a statesmanship which, if it was conservative, was at least not corrupt.

If the leisure classes no longer need be the carriers and supporters of artists and scientists, they retain their more fundamental function of the carriers of tradition. Leisure is not only the germinating time of art and philosophy, the time in which the seer attains glimpses of the values and the realities behind ordinary appearance; it is also the opportunity for appreciation, the time in which such values get across into common experience. The quality of a civilization depends upon the effectiveness of the transmission of such values. The widespread enjoyment of leisure is thus a matter of greatest moment, culturally as well as economically. Modern mechanisms open up new possibilities of communication; it remains to be seen what traditions and standards will be spread.

IDA CRAVEN

See: ARISTOCRACY; CLASS; SOCIAL PROCESS; LUXURY; GENTLEMAN, THEORY OF THE; COMMERCIALISM; INDUSTRIALISM; PURITANISM; HOURS OF LABOR; HOLIDAYS; VACATIONS; CONSUMPTION; AMUSEMENTS, PUBLIC; RECREATION; PLAY; SPORTS; PHYSICAL EDUCATION; ATHLETICS; PLAYGROUNDS; COMMUNITY CENTERS; CLUBS; TOURIST TRAFFIC; RESORTS; ALLOTMENTS; PUBLIC LIBRARIES; EDUCATION; WORKERS' EDUCATION; ADULT EDUCATION; ART; DANCE; THEATER; AMATEUR; WOMAN, POSITION IN SOCIETY.

Consult: Veblen, Thorstein, *The Theory of the Leisure Class* (new ed. New York 1912); Brown, A. Barrett, "The Leisure Problem" in *Hibbert Journal*, vol. xxviii (1929-30) 455-64; Stewart, Herbert L., "The Ethics of Luxury and Leisure" in *American Journal of Sociology*, vol. xxiv (1918-19) 241-59; Weber, Max, *Die protestantische Ethik und der Geist des Kapitalismus*, *Gesammelte Aufsätze zur Religionssoziologie*, vol. i (2nd ed. Tübingen 1922), tr. by T. Parsons (London 1930); Burns, C. D., *Leisure in the Modern World* (New York 1932); Cutten, G. B., *The Threat of Leisure* (New Haven 1926); Joad, C. E. M., *Diogenes, or the Future of Leisure* (London 1928); Lamb, Charles, *The Essays of Elia* (new ed. by H. E. Woodbridge, New York 1927); Pangburn, Weaver, "The Worker's Leisure and His Individuality" in *American Journal of Sociology*, vol. xxvii (1921-22) 431-41; Rives, Paul, *La*

corvée de joie (Paris 1924); May, Herbert L., and Petgen, Dorothy, *Leisure and Its Use* (New York 1928); Bouthoul, Gaston, *La durée du travail et l'utilisation des loisirs* (Paris 1924); series of articles on use of leisure time in different countries, in *International Labour Review*, vol. ix (1924) 227-41, 573-86, 815-938; International Labour Office, "Report on the Development of Facilities for the Utilisation of Workers' Leisure" in *International Labour Conference: Sixth Session, Reports*, 4 pts. (Geneva 1924) Report no. i, followed by two supplementary reports; International Labour Office, *Annual Review*, 1930 (Geneva 1931) p. 455-59; Depasse, C., and André, A., *L'organisation des loisirs du travailleur en Belgique et à l'étranger* (Paris 1931).

LELEWEL, JOACHIM (1786-1861), Polish historian. Lelewel, who was of German ancestry, was born in Warsaw and studied at the University of Vilna, where he was appointed lecturer in history in 1815. Three years later he became librarian and lecturer in history at the University of Warsaw; he returned to Vilna as professor of history in 1821. In 1824 he was dismissed from his post by the Russian authorities for participation in student political activities. In 1828 he was elected to the Polish Diet in Warsaw and for a time was in charge of the educational system of the Kingdom of Poland. During the insurrection of 1831 he was a member of the Polish national government but with the collapse of the insurrection he fled to France, where he assumed the leadership of the democratic elements of the Polish emigration. Banished from that country in 1833, he settled in Belgium, where he resumed his scholarly work without, however, discontinuing his activities on behalf of Polish freedom. All his life he pleaded the cause of international solidarity, social justice and equality of rights for the Jews. He maintained close relations with Lafayette, Mazzini and Engels and is said to have been one of the signatories to the *Communist Manifesto*.

Lelewel is the outstanding nineteenth century Polish historian. He brought to his subject a critical mind, an exceptional capacity for work and an expert knowledge of geography, bibliography, numismatics and other auxiliary disciplines, fields in which he himself had made pioneering contributions. He conceived of history as the all embracing study of the development of mankind and in his studies aimed at discovering the chain of causes which binds together the succession of historical events. In explaining historical phenomena he studied the psychology of the individual and of the group as well as the physical and sociological milieu of the nation. Although he was a rationalist in his

understanding of the past, like Herder and the romantic historical school he centered his studies around the development of the nation as a distinct political and cultural entity existing since earliest times. He saw the only basis for historical judgment and the sole guide for shaping future policies in national values as crystallized in the collective experience of the people. A great patriot and ardent democrat, he found in the early Polish institutions the elements of democracy, freedom and social justice which he deemed essential to a happy national life in the future.

MARCELI HANDELSMAN

Works: Lelewel's major works on Polish history are collected in *Polska, dzieje i rzeczy jej*, 18 vols. (Poznań 1846-68); *Wykład historii powszechnej* (Outline of general history), 5 vols. (Warsaw 1850); *Pamiętnik z roku 1830-31* (Memoirs) (Avignon 1832; new ed. by J. Iwaszkiewicz, Warsaw 1924); *Bibliograficznych ksiąg dwoje* (Two bibliographical books), 2 vols. (Vilna 1823-26, new ed. 1927); *Numismatique du moyen âge*, 3 vols. (Paris 1835); *Géographie du moyen âge*, 5 vols. (Brussels 1850-58).

Consult: Krzemiński, S., in *Wiek XIX. Sto lat myśli polskiej* (Nineteenth century—one hundred years of Polish thought), vol. iv (Warsaw 1908) p. 1-41, with complete bibliography; Śliwiński, Artur, *Joachim Lelewel. Zarys biograficzny lata 1786-1831* (Warsaw 1918, new ed. 1932); Chodynicki, K., *Lata uniwersyteckie Lelewela (1804-08)* (The university years of Lelewel) (Vilna 1929); Modelski, T. E., "Sprawa powołania J. Lelewela na katedrę historii w Wilnie" (The appointment of Lelewel as professor in Vilna) in *Ateneum wileńskie*, vol. vi (1929) 167-201, 486-582; Korzon, T., "Pogląd na działalność naukową J. Lelewela" (A view of the scientific activity of Lelewel) in *Kwartalnik historyczny*, vol. xi (1897) 257-309; Warnka, S., *Joachima Lelewela zasługi na polu geografji* (Lelewel's contributions to geography) (Poznań 1878); Handelsman, M., *Historyka* (Warsaw 1928) p. 82-89; Cichowicz, A., *Wybór pism historyczno-wojskowych* (Selected historico-military writings) (Warsaw 1923) p. 14-20; Chodynicki, K., "Zasadnicze składowiki syntezy dziejowej Lelewela" (The essential elements of the historical synthesis of Lelewel) in *Przegląd współczesny*, vol. ix, nos. 97-98 (1930) 259-66, 443-54; Limanowski, Bolesław, *Historja demokracji polskiej w epoce porozbiorowej* (History of Polish democracy in the postpartition period), 3 vols. (rev. ed. Warsaw 1922-23).

LEMIRE, ABBÉ JULES (1853-1928), French priest, politician and social reformer. Lemire's later preoccupation with the problem of drawing the clergy into the movement for social reform was foreshadowed in his *Le Cardinal Manning et son action sociale* (Paris 1893). The same year he was elected deputy from Hazebrouck, a department of his native French Flanders, and retained his seat in the Chamber uninterruptedly until his death. He soon evinced an attachment to the

republic and to democracy, which resulted in his making more friends on the left than on the right. He made an effort to develop a party organization for the Christian Democrats, who were led by Léon Harmel. In order to stimulate social activity among the lower clergy Lemire with the support of several archbishops organized two congresses of priests, the first at Reims in 1896 and the second at Bourges in 1900. During the same period he created a society known as the Ligue du Coin de Terre et du Foyer for the promotion of one of his favorite projects, state provision of a small plot of land for every family. Through his efforts and those of the league this idea was realized by the law on the *bien de famille* passed in 1909 and modeled on the American Homestead Act. Little advantage, however, was taken of the privilege. Lemire therefore turned his attention to the creation of workmen's gardens to be organized on the outskirts of towns through private or municipal societies. Between 1903 and 1923 he directed the convocation of six national congresses to deal with this question. During the first decade of his membership in the Chamber, while Leo XIII was pope, Lemire had enjoyed the esteem and his bold innovations the support of the papacy. But he made enemies among the royalist and conservative Catholics, who were especially powerful in the diocese of Cambrai, to which he belonged as priest. Under Pius X they had their revenge. Although he failed in his attempts to prevent Lemire's candidacy for deputy in 1910 and again in 1914, the archbishop of Cambrai was able to inflict a canonical penalty upon him. The penalty was lifted during the World War.

GEORGES WEILL

Consult: Jean-Robert, and Remy, Gabriel, *Une grande figure... l'abbé Lemire* (Paris 1929); Droulers, Charles, *Chemin faisant avec l'abbé Lemire* (Paris 1929); Weill, G., *Histoire du mouvement social en France, 1852-1924* (3rd ed. Paris 1924) p. 418-19; Barbier, E., *Histoire du catholicisme libéral et... social en France (1870-1914)*, 5 vols. (Bordeaux 1923) vols. iii-iv.

LEMONNIER, CHARLES and ÉLISA, French reformers. After giving up a chair in philosophy because of a conflict over his social theories Charles Lemonnier (1806-91) led in developing the pacifist ideas of the Saint-Simonian school of socialism. Arguing that universal organization for peace depended on organizing Europe along the lines of the United States of America and the Swiss Confederation he proposed to group all republican states under a superior government with power to administer

common finances and a federal army. The constituent states were to be disarmed. In 1867 he helped found the still existing Ligue Internationale de la Paix et de la Liberté, of which such men as Hugo, Quinet, Garibaldi and Mill became members. He also helped found and edit its organ, *Les États-Unis d'Europe*, which has appeared intermittently since 1868 and is now in its fifteenth series. In 1873 he drafted an arbitration treaty, probably the first legal formulation of ideas theretofore expounded only in moral and political form.

Among Lemonnier's works is a biography of his wife, Élisabeth Lemonnier (1805-65), who in 1848 under the influence of her husband's Saint-Simonian ideas opened a workshop for mothers of families impoverished as a result of the February revolution. Observing their incompetence and awkwardness she resolved to undertake the moral and vocational education of girls. In 1856 she founded a Société de Protection Maternelle pour les Jeunes Filles, which in 1862 became the Société pour l'Enseignement Professionnel des Femmes. The success of the two non-sectarian Écoles Élisabeth Lemonnier founded by these organizations was spectacular. Similar schools were organized in Switzerland, Belgium and Italy. Élisabeth Lemonnier's pedagogical formula, a division of the courses into two main groups—general instruction including French language and arithmetic and special instruction including commercial courses, bookkeeping, elements of law and foreign languages—became the basis of a French educational statute of 1880, since applied successfully by the city of Paris.

MAXIME LEROY

Important works: *Les États-Unis d'Europe* (Paris 1872); *Commentaire sur les principales polices d'assurance maritime usitées en France*, 2 vols. (Paris 1843); *Élisabeth Lemonnier* (Saint-Germain 1866); "Essai sur les oeuvres et la doctrine de Saint-Simon" in Saint-Simon, C. H., *Oeuvres choisies*, 3 vols. (Brussels 1859) vol. i, p. v-cv.

LENIN, NIKOLAI I. See ULYANOV, VLADIMIR ILYICH.

LEO III (The Isaurian) (c. 680-741), ruler of the Eastern Empire. Leo is scarcely known outside the writings of his enemies. An Asiatic born at Germanicia (Mar 'ash), probably in a heretic environment hostile to the worship of icons, he emigrated to Thrace. Justinian II favored him and Anastasius II made him general of Anatolia. Leo refused to recognize the usurper Theodosius and was proclaimed emperor by his army; he

entered Constantinople March 25, 717. His successful defense of the city against the Saracens in 717-18 was the first rebuff to the Arabs in the east and has the same historic importance as the battle of Poitiers in the west.

After putting down military revolts, checking conspiracies and transporting Anatolian populations to Europe he proclaimed a new legal code, the *Ecloga* (published in 740 and drawn up in its present form in the ninth century), which is in principle an abstract of the Justinian code but completed and amended on many points. It raised the status of women, ameliorated tribunals and tempered the laws against heretics. Leo's agricultural law protected free peasants against encroachments of large estates. Other edicts attacked Jews and Montanists. In 726 Leo proscribed image worship, and his order to demolish the statue of Christ surmounting the gate of the sacred palace aroused a bloody disturbance. Greece and Italy refused to pay taxes, and Pope Gregory II protested. Leo retaliated by confiscating the papal patrimonies, depriving the pope of jurisdiction over southern Italy and Illyricum and doubling the tribute. John of Damascus, a Jerusalem monk, attacked Leo in three discourses and Gregory II proclaimed the legitimacy of image worship. On his death Leo left the empire in good external condition but with civil war imminent.

LOUIS BRÉHIER

Consult: Diehl, Charles, "Leo III and the Isaurian Dynasty" in *Cambridge Medieval History*, 6 vols. (Cambridge, Eng. 1911-29) vol. i, ch. i; Schwarzlose, Karl, *Der Bilderstreit* (Gotha 1890); Schenk, Karl, *Kaiser Leo III* (Halle 1880), and "Kaiser Leons III. Walten im Innern" in *Byzantinische Zeitschrift*, vol. v (1896) 257-301; Bréhier, Louis, *La querelle des images (VIII^e-IX^e siècle)* (Paris 1905); Ostrogorsky, Georg, *Studien zur Geschichte des byzantinischen Bilderstreites*, Historische Untersuchungen, vol. v (Breslau 1929); Albertoni, Aldo, *Per una esposizione del diritto bizantino* (Imola 1927) p. 48-53, 119-21, with bibliography; Pantchenko, B. A., *Krest Yanskaya sobstvennost v Vizantii*, Russky Archaologicheskii Institut, Constantinople, *Izvestiya*, vol. ix (Sofia 1904); Rein, Eduard, "Kaiser Leon III und die ökumenische Akademie zu Konstantinopel" in *Suomalainen Tiedekatemia, Toimituksia*, ser. B., vol. xi (1919) 1-43; *A Manual of Roman Law: the Ecloga*, tr. by E. H. Freshfield (Cambridge, Eng. 1926); *A Revised Manual of Roman Law, Founded upon the Ecloga*, tr. by E. H. Freshfield (Cambridge, Eng. 1927).

LEO XIII (1810-1903), pope from 1878. Leo XIII, born Gioacchino Pecci, received his education at the Jesuit school of Viterbo and the Collegio Romano and at the Accademia dei

Nobili in Rome. From 1843 to 1846 he was papal nuncio to Brussels and from 1846 to 1878 archbishop of Perugia. In 1853 he was named cardinal by Pius IX and in 1878 he was elected pope.

The great historical importance of Leo XIII rests on his formulation of the Catholic attitude toward modern social and political problems and his influence on the development of the social Catholic movements. His views on these questions are found in his encyclicals *Quod apostolici muneris* (1878, tr. as *Socialism, Communism, Nihilism*); *Arcanum divinae* (1880, tr. as *Christian Marriage*); *Libertas praestantissimum* (1888, tr. as *Human Liberty*); *Sapientiae christianae* (1890, tr. as *The Chief Duties of Christians as Citizens*); *Au milieu des sollicitudes* (1892, tr. as *Allegiance to the Republic*); *Graves de communi* (1901, tr. as *Christian Democracy*); and more especially in *Immortale Dei* (1885, tr. as *Christian Constitution of States*) and *Rerum novarum* (1891, tr. as *On the Condition of the Working Classes*). Leo derived his inspiration for these doctrines chiefly from a profound study of the writings of Thomas Aquinas. He emphasized the importance of Aquinas in his encyclical *Aeterni patris* (1879, tr. as *The Study of Scholastic Philosophy*) and in this way contributed greatly to the development of the neo-Thomist movement. In his political philosophy he adhered to the organismic view of the state, considering the state necessary for human welfare and declaring its ordinances to have a moral and binding force. The state is supreme and independent in its own province, which is "the civil and political order." Its end, however, should be the promotion of the general welfare, which includes concern for the material well being of the population as well as mere civil and political rights. The form of government of a state is the result of purely human and historic conditions, hence any form is legitimate provided it insures this general welfare. Very significant too was Leo's urging of all Catholics to take an active part in political affairs in order to aid in the realization of these principles.

Leo's social doctrines had a powerful effect in giving official sanction to the emerging social Catholic movements and in spurring them on to further development. His *Rerum novarum*, which was issued in response to the need for authoritative guidance in the application of Catholic principles to industrial relations, was the most comprehensive statement in that field until it was reaffirmed, reapplied and supplemented by the encyclical of Pius XI *Quadragesimo anno*

(1931, tr. as *On Reconstructing the Social Order*). The church, Leo maintained, has a right to pass judgment upon economic actions and relations, inasmuch as they are subject to the moral law. Private ownership even of capital is sanctioned by natural law and is necessary for human welfare, but it should be widely and more equitably distributed so that "the gulf between vast wealth and sheer poverty will be bridged over." A free contract is not always a just contract in the matter of wages, for the worker has a moral right to compensation which will at least be sufficient for a decent livelihood; laborers have a natural right to enter into and maintain unions which will enable "each individual member to better his condition to the utmost in body, mind and property"; and the state is obliged to intervene for the protection of the working classes as well as for "the general interest" whenever adequate protection cannot be otherwise provided.

JOHN A. RYAN

Works: *Leonis XIII. Pontificis maximi acta*, 23 vols. (Rome 1881-1905); *The Great Encyclical Letters of Pope Leo XIII*, ed. by J. J. Wynne (New York 1903).

Consult: T'Serclaes de Wommerson, Charles de, *Le pape Léon XIII: sa vie, son action religieuse, politique et sociale*, 3 vols. (Paris 1894-1906), partially tr. by M. F. Egan (Chicago 1903); McCarthy, Justin, *Pope Leo XIII* (2nd ed. New York 1899); Goetz, Walter, "Papst Leo XIII" in *Meister der Politik*, ed. by Erich Marcks and K. A. von Müller, 3 vols. (Stuttgart 1922-23) vol. iii, p. 461-83; Germiny, Charles de, *La politique de Léon XIII* (2nd ed. Paris 1902); Goetz, L. K., *Leo XIII, seine Weltanschauung und seine Wirksamkeit* (Gotha 1899); Schilling, Otto, *Die Staats- und Soziallehre des Papstes Leo XIII* (Cologne 1925); Tischleder, Peter, *Die Staatslehre Leos XIII* (M.-Gladbach 1925).

LEO, HEINRICH (1799-1878), German historian and publicist. In politics Leo always stood between the older clerical conservatism of his friend Ludwig von Gerlach, whose intrinsic culture, however, he lacked, and the newer militaristic conservatism, although he was unaware of the needs of a diplomacy conscious of its political responsibility. While a student and member of the *Burschenschaft* he was a radical democrat but was pushed to the right by the revolutions of 1830 and 1848 and became a typical reactionary. The son of a clergyman, he now discovered his own orthodoxy, which as the intellectual form of antirevolutionism assumed a correspondingly militant cast. He also discovered that he was still really rooted in the old tradition and, in opposition to the capitalistic groups of "manufacturers and Jews" growing up with the economic revolution, felt impelled as the repre-

sentative of the intellectual upper class of the middle bourgeoisie to defend the landowning estates, the military caste and the clergy, which were also threatened by plutocratic development. He became an advocate of the old order based on estates and an opponent of the emerging society based on class divisions, thus following the pattern typical of the first stage of industrialism, in which conservative opinion opposing the new order sympathizes with the oppressed proletariat. He regarded the liberal ideology of freedom as merely a disguise for the economic drive toward supremacy; in the idea of pacifistic humanitarianism he saw only a leveling sentimentality under cloak of which gross materialism and intellectualistic rationalism could flourish. To these tendencies Leo opposed his ideal of the old order of estates, resting on simplicity, strength and good breeding, organized patriarchally and imbued with the attitude toward life of the "God fearing hired soldier," for whom war signifies "life" in its proper or dramatic sense. Leo's writing of history is both antihumanitarian and antihumanistic, a genuine example of bourgeois learning become reactionary. It detests all periods beloved by liberal culture—classical antiquity as well as the period from the Reformation and the Enlightenment to the French Revolution—and extols the Middle Ages, the Restoration and finally the era of Bismarck with its triumph of national militarism. Thus Leo held a concept of history which reconciled the conservative point of view of the old order of estates with that of the new Prussian nationalism.

ALFRED VON MARTIN

Important works: *Geschichte der italienischen Staaten*, 5 vols. (Hamburg 1829-37); *Studien und Skizzen zu einer Naturlehre des Staates* (Halle 1833); *Zwölf Bücher niederländischer Geschichten*, 2 vols. (Halle 1832-35); *Die Hegelingen* (Halle 1838, 2nd ed. 1839); *Leitfaden für den Unterricht in der Universalgeschichte*, 4 vols. (Halle 1838-40); *Lehrbuch der Universalgeschichte*, 4 vols. (Halle 1835-38; 3rd ed. in 6 vols., 1849-56); *Vorlesungen über die Geschichte des deutschen Volkes und Reiches*, 5 vols. (Halle 1854-67).

Consult: Krägelin, Paul, *Heinrich Leo*, Beiträge zur Kultur- und Universalgeschichte, vol. vii (Leipzig 1908); Bonwetsch, N., "Der Historiker Heinrich Leo in seinen Briefen an Hengstenberg" in Königliche Gesellschaft der Wissenschaften zu Göttingen, Philologisch-historische Klasse, *Nachrichten* (1917) 349-98; Below, G. von, "Heinrich Leo" in *Deutsche Vierteljahrsschrift für Literaturwissenschaft und Geistesgeschichte*, vol. ii (1924) 533-55, and *Die deutsche Geschichtschreibung von den Befreiungskriegen bis zu unseren Tagen* (Munich 1924); Masur, G., "Heinrich Leo" in *Mitteldeutsche Lebensbilder*, vol. iii (1928) 392-413.

LEONHARD, RUDOLF KARL GEORG (1851-1921), German jurist. Leonhard was successively professor at Göttingen, Halle, Marburg and Breslau. He was important in connection with the problems of interpretation arising from the new German civil code which went into effect in 1900. Imbued with the spirit of Jhering, whose colleague he had been for four years at Göttingen, he had already shown his awareness of modern needs in his treatment of the Pandects. In his *Der allgemeine Teil des bürgerlichen Gesetzbuchs* (Berlin 1900) he now sought on the one hand to orient the general part of the code in its historical background and on the other to give effect to the purposes of its creation. The abstract character of the general part made this an especially difficult task. An early work of Leonhard's, *Der Irrtum bei nichtigen Verträgen nach römischem Recht* (2 vols., Berlin 1882-83), achieved a new and fundamental importance in a revised edition under the title *Der Irrtum als Ursache nichtiger Verträge* (published in the *Studien zur Erläuterung des bürgerlichen Rechts*, vols. xxii-xxiii, Breslau 1907), a series which Leonhard edited after 1900. In this work Leonhard attacked one of the leading problems of interpretation under the code, the problem of the making of a valid contract. He came to the conclusion that the code provisions relating to the effect of mistake upon a declaratory act did not control the general problem of consent. He counseled the abandonment of the theory of declaration, because its correct elements follow directly from a true interpretation of the theory of intent. Leonhard achieved an international reputation. In 1907-08 he lectured at Columbia University and in 1912 published a German translation of Holmes' *The Common Law*. As an internationally minded jurist he always fought against the tendency to exaggerate nationalistic attitudes in the law.

ALFRED MANICK

Consult: Manick, Alfred, in *Deutsches biographisches Jahrbuch*, vol. iii (Berlin 1927) p. 180-83.

LEONTOVICH, FEDOR IVANOVICH (1833-1910), historian of Russian law. Leontovich occupied the chair of history of Russian law at the University of Odessa and later at the University of Warsaw. His researches were mainly concerned with the legal institutions of the Kiev period in early Russian history and with the history of those provinces of southern and western Russia which during the fourteenth, fifteenth

and sixteenth centuries came into the fold of the Lithuanian principality. His investigation of early Russian history led him to the conclusion, shared by later Russian historians, that the basic political and social life of the Russian peoples of the early period revolved around communes resembling those which flourished among the Balkan Slavs under the name of *zadrugi*. He denied emphatically the existence of a national consciousness which would in this early period have provided a basis for the political union of the various branches of the Russian Slavs; this view, however, remained unaccepted in Russian historical literature. In the course of researches devoted to the evolution of Lithuanian Russian law Leontovich reconstructed the history of those early Russian countries which were incorporated in the Lithuanian principality after the Tartar invasion; he established the common origin of their social structure and emphasized the changes brought about by Polish influence in Lithuania. Although his theories were attacked by many later historians, his works have not lost their importance, chiefly because of the wealth of data collected.

V. MIKOTIN

Important works: *Krestyane ugo-zapadnoy Rossii po litovskomu pravu xv i xvi vekov* (The peasants of southwestern Russia under the Lithuanian law in the fifteenth and sixteenth centuries) (Kiev 1863); "Russkaya Pravda i Litovskiy Statut" (Russian law and the Lithuanian Statute) in *Kievskiya universitetskaya izvestiya*, nos. 2-4 (1865); *Istoriya russkago prava* (The history of Russian law) (Odessa 1869); *Ochevki istorii litovsko-russkago prava* (Outline of the history of Lithuanian Russian law) (St. Petersburg 1894); "Natsionalny vopros v drevney Rossii" (The national problem in early Russia) in *Varshavskiya universitetskaya izvestiya*, no. 9 (1894), and no. 1 (1895).

LEONTYEV, KONSTANTIN NIKOLAYEVICH (1831-91), Russian philosopher and journalist. Leontyev began life as a physician, taking part in the Crimean War and later going into private practise. During this period he wrote several novels, which developed the theme of free love made popular at the time by George Sand. In 1863 he entered the consular service in the Near East but resigned in 1871 to embrace religion as a monk. To these years belong a number of novels and short stories offering a realistic and skilfully drawn picture of the life of the Christian population under Turkish rule. Having failed of admission to the monastery on Mount Athos, he reentered the foreign service for two short periods, acted as assistant editor of the government newspaper *Varshavsky dnevnik*

(Warsaw chronicle) and worked as censor in Moscow before retiring to a monastery in Russia in 1887. In the last decade of his life he earned a certain notoriety as the apologist of extreme reaction and an advocate of "the voluptuous cult of corporal punishment."

Leontyev's originality as a religious and political thinker was recognized only after his death. He regarded fear as the beginning of all wisdom and love as only its fruit; therefore, not unlike Nietzsche, he contemptuously dismissed ethics and called for the assertion of force. He saw no warrant in the Gospels for the belief that mundane existence will ever cease to be dominated by evil and emphasized the ascetic elements of Christianity and the hierarchic aspects of church organization. He found the meaning of history in the development of a small élite for mystical purposes. In the course of their historical evolution peoples pass from the stage of youthful simplicity to that of fully developed complexity, when society is divided into fixed classes and life is stable and aesthetically satisfying; such complex societies must be ruled by force—an authoritarian clerical hierarchy and an autocratic centralized monarchy. The last stage of national existence, which he identified with the ugliness and philistinism of an egalitarian-democratic civilization, is that of artificial simplicity resulting from decay. He believed that Russia might be saved from this fate and acquire a historical mission if its natural evolution were arrested and the Byzantine elements of Russian culture—autocracy and the Greek church—as well as the indigenous village community were preserved and strengthened. Leontyev believed in Byzantinism rather than Slavophilism or Panslavism. He desired the annexation of Constantinople by Russia to provide the basis for an integral cultural development and looked askance upon the nationalist democratic aspirations of the southern Slavs.

I. V. DIONEIO-SHKLOVSKY

Works: Collected works, ed. by I. Fudel, 9 vols. (Moscow 1912-13).

Consult: Pamyati K. N. Leontyeva (Memorial volume for K. N. Leontyev) (St. Petersburg 1911) containing a bibliography; Berdyaev, N. A., *Konstantin Leontyev* (in Russian) (Paris 1926), with a selected bibliography; Masaryk, T. G., *Zur russischen Geschichts- und Religionsphilosophie*, 2 vols. (Jena 1913), tr. by E. and C. Paul as *The Spirit of Russia*, 2 vols. (London 1919) vol. ii, ch. xvi; Miliukov, P. N., *12 istorii russkoy intelligentsii* (2nd ed. St. Petersburg 1903), tr. by J. W. Bienstock as *Le mouvement intellectuel russe* (Paris 1918) ch. viii.

LEOPOLD II (1835-1909), Belgian king. Leopold, who came to the throne in 1865, is important chiefly for his leadership in opening up Africa to European imperialism after Stanley's explorations. In 1885 an international association headed by Leopold and largely financed by Belgian capital was formed at the Congress of Berlin to settle the Congo. It claimed to be actuated by humanitarian ideals, but its imperialistic drive was soon obvious. The independent Congo state fell increasingly under Belgian domination and in 1907 Leopold annexed it. Leopold's Congo policy, a clear breach of the Berlin contract, was a classic demonstration of the aims and methods of modern imperialism, which regards a colony as an opportunity for exploitation. Native labor was made compulsory, native social and political organization was deliberately smashed and the natives were converted into impersonal tools of production. As the governor general said in 1906, the state was to be left "face to face with a population freed of all social liens and without any attachment to the soil." Leopold, holding that these were no deplorable concessions to circumstances but necessary steps in imperialist policy, struggled against the reform campaign led by E. D. Morel. His policy brought him a large fortune as long as raw wealth lay ready for the taking. But when elementary industrialization became necessary, exploitation and subjugation by concessionaire companies, troops and black mercenaries proved an inefficient system of production. Leopold, having no further suggestions to offer, continued, however, to advocate the old policy. He made no enduring contribution to the theory of colonization.

STEPHEN H. ROBERTS

Consult: Rappoport, Angelo S., *Leopold the Second* (London 1910); *Léopold II et Beernaert d'après leur correspondance inédite de 1884 à 1894*, ed. by Édouard van der Smissen, 2 vols. (Brussels 1920); Elst, Baron van der, "Léopold II et la Chine" in *Revue générale*, vol. cxi (1924) 410-37, 570-97; Zimmermann, Emil, "Leopold der Zweite von Belgien als erster Vorkämpfer Mitteleuropas" in *Grenzboten*, vol. lxxv, pt. ii (1916) 393-404; Ridder, A. de, *Le mariage du roi Léopold II* (Brussels 1925); Kerken, Georges van der, *Les sociétés cantones du Congo belge et les problèmes de la politique indigène* (Brussels 1920); Congrès Colonial National, 1920, *Compte rendu des séances* (Brussels 1921), and Congrès Colonial Belge, 1926, *Comptes rendus et rapports* (Brussels 1926).

LE PLAY, PIERRE GUILLAUME FRÉDÉRIC (1806-82), French social reformer. From 1829 to 1853 during his travels as an engineer Le Play studied the technical progress, the eco-

conomic prosperity and the status of labor in all European countries. In 1848 he gave up his professorship of metallurgy in the École des Mines and henceforth devoted himself chiefly to propounding his theory of social reform. His first important work, *Ouvriers européens* (Paris 1855; 2nd ed., 6 vols., Tours 1877-79), was a collection of monographs on the material and moral life of thirty-six families. After the appearance of this book he founded the Société d'Économie Sociale for the propagation of his ideas. At the suggestion of Napoleon III he published an extract from *Ouvriers européens* under the title *Réforme sociale en France* (2 vols., Paris 1864; 7th ed., 3 vols., 1887) containing observations on religion, property, family, association, private enterprise and government, which won for him great success in government and academic circles. This was followed by *L'organisation de la famille* (Paris 1871, 3rd ed. Tours 1884); *La constitution de l'Angleterre* (2 vols., Tours 1875), in which English education and legislation were portrayed as ideal; *Réformes en Europe et le salut en France* (Tours 1876); and finally in 1881 as a synthesis of his ideas the *Constitution essentielle de l'humanité* (Tours 1881, 2nd ed. 1893). He founded local and autonomous groups for the propagation of his views and won many adherents, among whom were A. J. Focillon, Charles de Ribbe, Claudio Jannet and Demolins. The review *Réforme sociale* was established in 1881 to carry on his work.

Le Play was a pioneer in establishing the methodology of the social survey and in studying family budgets for the purpose of determining standards of living; his work in this field has had international influence. In opposition to the parties and doctrines which sprang from the French Revolution he set forth the principles of Christian morality, duty and obedience to authority as the bases of a sound economic and social organization. He maintained that wherever traditional Christian morals had remained in force social tranquillity and economic well being reigned; he found confirmation for this idea not only in Russia and England but in the history of his own small native province of Normandy. He regarded private property, as opposed to purely ideal common ownership, as the foundation of the modern state and therefore advocated a free law of inheritance, as opposed to the restriction which since the covenant of 1793 prescribed in France equal division of property among the children. This law designed to protect democratic institutions against the nobility had led to

parceling of land, a development which he believed imperiled the family as well as economy. He held the patriarchal family, which he wished to restore, to be the basis of morality and social organization, especially among the lower classes, and denounced birth control. He opposed governmental regulation to solve labor problems arising from the effects of the industrial revolution and the collapse of the guilds and advocated instead the cooperation of employers and workers for the purposes of safeguarding the religion, property and family of the working population. The emancipation of the oppressed he held to be the task of the upper classes, who owed their workmen more than mere wages. He contended that the superiority of the English administration rested on self-government, esprit de corps and family spirit, while in France the omnipotent bureaucracy destroyed local and provincial independence. Democracy to him was natural for the community; aristocracy—representation by people of rank—for the province; and monarchy with the support of parliament for the entire state.

GOTTFRIED SALOMON

Consult: Auburtin, F., *Frédéric Le Play d'après lui-même* (Paris 1906); Baunard, Louis, *Frédéric Le Play, la foi et ses victoires*, 2 vols. (vol. i 6th ed., vol. ii 4th ed. Paris 1893) vol. ii; Boutmy, E. M., "Le Play et la réforme sociale" in *Revue nationale*, vol. xxi (1865) 389-424; Sainte-Beuve, C. A., *Nouveaux lundis*, 13 vols. (2nd-5th eds. Paris 1872-81) vol. ix, p. 161-201; Ribbe, Charles de, *Le Play d'après sa correspondance* (2nd ed. Paris 1906); Curzon, E. de, *Frédéric Le Play, sa méthode, sa doctrine, son oeuvre, son esprit* (Paris 1899); Vignes, J. B., *La science sociale d'après les principes de Le Play et de ses continuateurs*, 2 vols. (Paris 1897); Gide, C., and Rist, C., *Histoire de doctrines économiques depuis les physiocrates jusqu'à nos jours* (5th ed. Paris 1926), tr. from 2nd French ed. by R. Richards (London 1915) p. 486-95.

LEPSIUS, KARL RICHARD (1810-84), German Egyptologist. Lepsius studied archaeology with Otfried Müller and philology with Bopp and Böckh, receiving his doctor's degree in 1833, a year after the death of Champollion. He had already attracted the attention of his university teachers when he was invited by C. K. J. Bunsen, the first director of the newly founded German archaeological institute in Rome, to undertake studies in the Italic dialects and more especially in the monuments of the newly deciphered Egyptian. In France there were at that time no successors of Champollion fully equal to the task of carrying on the noble tradition he had established. In Italy Salvolini and Rosellini were

of decidedly inferior capacities, and in Germany the science of Egyptology had not even begun. It fell to the lot of Lepsius therefore not only to found the new science of Egyptology in Germany but also very largely to secure for Egyptology full recognition as a science and to save it from the hands of the dilettante. By 1838 he had made himself master of the then available body of knowledge which formed the earliest stage of the youthful science. His first Egyptological publication was a letter written in 1837 to Rosellini on the hieroglyphic alphabet, and his first more substantial work was a folio published in 1842 containing a selection of the chief hieroglyphic monuments of Egypt for the use of students. This was quickly followed by the first modern edition (Leipsic 1842) of the *Egyptian Book of the Dead*, based upon an unfortunately late papyrus, which Lepsius found in the collections at Turin.

From the beginning Lepsius' keen and enthusiastic mind had discerned the necessity for fundamental work in the new science in Egypt itself. At the instigation of Bunsen and Alexander von Humboldt, Frederick William IV of Prussia dispatched Lepsius to Egypt on a scientific mission among the monuments of the Nile. Lepsius' conception of what he ought to accomplish on this journey had grown steadily, until his plans had passed far beyond the mere mission of a single handed scholar and provided for a well manned expedition, in personnel and experience without question the most efficient group which up to that time had ever worked in the Orient. It included architects, draftsmen, painters and even plaster molders to make casts of the original monuments. Lepsius began his work in Egypt in September, 1842, and finished in October, 1845; its results were published in his *Denkmäler aus Aegypten und Aethiopien* (12 vols., Berlin 1849-59). These volumes revolutionized the situation of Egyptological science and for the first time placed in the hands of scholars a body of original sources reflecting the entire civilized development on the Nile for a period of over three thousand years—from about 3000 B.C. down into the Christian era. For the first time the Old Kingdom (about 2980-2475 B.C.), mirrored in its records, which Lepsius had found especially in the great cemeteries of Gizeh and Sakkara, was revealed to the modern world. Of the Middle Kingdom (c. 2160-1788 B.C.) likewise the sources presented by these folios were for the first time adequately representative. The work of Lepsius thus added

a new and earlier period of human development to modern knowledge; that is, an earlier thousand years of human history than had been known before. On the other hand, the classic tradition inherited from Greek historians that Ethiopia had been the oldest source of civilization on the Nile was completely and finally demolished by his discoveries.

Lepsius was primarily an archaeologist, venturing only sparingly and very cautiously into the field of philological research. He translated very few Egyptian monuments and has left almost no such translations among his works. Nevertheless, his work included a wide range of investigations: from his *Die Chronologie der Aegypter* (Berlin 1849) and his epoch making *Königsbuch der alten Ägypter* (2 vols., Berlin 1858) to his phonetic studies in the East undertaken to produce an alphabet for universal use in transliterations, his masterly study and classification of the African languages covering the whole continent and his last scientific production, a grammar of the Nubian languages.

Shortly after his return from his great expedition the first chair in the new science in Germany was established at Berlin. In August, 1846, Lepsius was appointed the first professor of Egyptology in a German university, and four years later he was elected a member of the *Königliche Akademie der Wissenschaften* in Berlin. In 1855 in a new building planned by himself he installed the famous Egyptian Museum at Berlin, of which he became the first director. Thus by his own brilliant achievements and through his three influential positions Lepsius gave to Berlin its commanding position in Egyptological science, a leadership which two generations of his successors there have worthily maintained.

JAMES HENRY BREASTED

Consult: Dillmann, C. F., "Gedächtnissrede auf Karl Richard Lepsius" in *Königliche Akademie der Wissenschaften*, Berlin, *Abhandlungen*, 1885 (Berlin 1886) p. 1-25; Ebers, Georg, *Richard Lepsius* (Leipsic 1885), tr. by Zoe Dana Underhill (New York 1887), with bibliography of Lepsius' works p. 325-47.

LEROUX, PIERRE (1797-1871), French social philosopher. Very much influenced by Condorcet and by the religious currents of his time, Leroux was one of the most important disciples of Saint-Simon. With Dubois he founded the *Globe*, which became the organ of the Saint-Simonians after 1830. After this he founded the *Revue encyclopédique*; later with J. Reynaud he established the *Encyclopédie nouvelle* and with

George Sand the *Revue indépendante*, two other Saint-Simonian publications which constitute one of the fruitful sources of French socialist ideology.

He was a vigorous critic of modern society, in which "the millionaires and the capitalists are the nobles of our time"; of the democratic political regime, subjected to the "despotism of the majorities"; of the wage system, which allotted to the workers less than half of the revenue produced by their labor; of the Catholic religion; of the family; of property. A feminist and "revolutionary pacifist," he sought to reconcile labor with property, religion with philosophy. It was upon the republican motto, Liberty, equality, fraternity, that he based his system, which may be defined as a progressive and religious democracy. "We gravitate toward God," he wrote.

Leroux saw that man is a social product; he may thus be considered with Bonald and Saint-Simon as one of the precursors of modern sociology. Far from wishing to absorb man into society, however, he sought to individualize him—all men are equal, but they are also jointly responsible. He demanded "a complete society in which the individual may be free." In his appeal "Aux politiques" (in *Situation actuelle de la société*, Boussac 1847) he wrote that the role of society "is to give to all its members, to each according to his needs, his capacity and his works, the enjoyment of the product of the common labor, whether such labor be an idea, a work of art or material property."

All men, he held, must work and fulfil a function; hence they should be called functionaries. They will elect an assembly which will be divided into three subgroups—judicial, legislative and executive—which will appoint the national administration.

Leroux claimed and is generally accorded the honor of having been the first to use the term socialist about 1833; actually the term is already to be found in an Owenite publication of the year 1827. Leroux was, however, the first to analyze the concept (in an article "De l'individualisme et du socialisme" in *Revue encyclopédique* for 1834). He is also to be credited with having given the word solidarity, previously current only in legal usage, its present ethical meaning.

MAXIME LEROY

Important works: *Refutation de l'éclectisme* (Paris 1839, new ed. 1841); *De l'humanité*, 2 vols. (Paris 1840); *D'une religion nationale* (Boussac 1846); *Du christianisme et de son origine démocratique* (Paris 1848); *De*

l'égalité (Boussac 1838, new ed. 1848); *La grève de Samarez* (Paris 1863); *Job* (Paris 1866).

Consult: Pioger, Julien, *Pierre Leroux socialiste* (Paris 1896); Raillard, Célestin, *Pierre Leroux et ses oeuvres* (Châteauroux 1899); Thomas, P. Félix, *Pierre Leroux, sa vie, son oeuvre, sa doctrine* (Paris 1904); Mirecourt, Eugène de, *Pierre Leroux* (Paris 1856); Janet, Paul, "La philosophie de Pierre Leroux" in *Revue des deux mondes*, vol. clii (1899) 767-88, and vol. cliii (1899) 379-406; Fidaio-Justiniani, J.-E., *Pierre Leroux* (Paris 1912).

LEROY-BEAULIEU, PAUL (1843-1916), French economist. After studying law in Paris Leroy-Beaulieu traveled in England and then went to Bonn and Berlin for further study. He made his début as a writer in 1867 with the prize essay on *L'état moral et intellectuel des classes ouvrières et de son influence sur le taux des salaires* (Paris 1868) and at the age of twenty-seven won four prizes offered by the Institut. From 1869 he collaborated on the *Revue des deux mondes* and in 1871 became an editor of the *Journal des débats*. When Boutmy formed the École Libre des Sciences Politiques in 1872 Leroy-Beaulieu accepted the chair of public finance. In 1873 he founded *Économiste français* and became its editor, missing only one weekly article until his death. In 1880 he succeeded Chevalier as professor of political economy at the Collège de France.

Leroy-Beaulieu was one of the outstanding representatives of economic liberalism in France. His views, formulated in a number of works and elaborated in the *Traité théorique et pratique d'économie politique* (4 vols., Paris 1895; 5th ed., 5 vols., 1910), followed essentially the principles of classical economics. He rejected, however, the pessimistic conclusions of the latter and in the *Essai sur la répartition des richesses* (Paris 1881, 4th ed. 1897) argued that the Ricardian law of rent had no present application and that the subsistence theory of wages and its derivative, the iron law of wages, existed only in the imagination of their authors. In his value theory he followed the marginal analysis of the Austrians. His chief work, the *Traité de la science des finances* (2 vols., Paris 1877; 8th ed. 1912), was for a long time the leading treatise on fiscal science. The popularity of the first volume, dealing with public revenues, was subsequently impaired by the failure to emphasize the social aspects; the second volume, devoted to public credit, retains its importance to the present day. Although he was an outspoken opponent of state intervention Leroy-Beaulieu pleaded in his works on colonization and on population prob-

lems for positive state action in promoting colonial expansion and in encouraging a higher birth rate by offering financial rewards to large families. Among his many other works the more important deal with the labor question, the modern state and collectivism.

Leroy-Beaulieu played a prominent part in the economic life of France; an owner of large tracts of land at home and in the colonies and a successful farmer, he took a keen interest in agriculture and frequently acted in an advisory and executive capacity for many industrial and financial organizations. His lack of sympathy with the social currents of the day prevented him from succeeding in several attempts to enter the parliament. Leroy-Beaulieu will live as an economic journalist without peer and as an economist of remarkable brilliance and clarity rather than of depth.

EDWIN R. A. SELIGMAN

Consult: Pirou, Gaëtan, *Les doctrines économiques en France depuis 1870* (Paris 1925) p. 116-26; Stourm, René, in *Revue des deux mondes*, ser. vi, vol. xxxviii (1917) 532-53; Payen, Édouard, in *Journal des débats*, vol. xxiii, pt. ii (1916) 953-55, reprinted in *Économiste français*, vol. xlv, pt. ii (1916) 805-07; Eichthal, Eugène d', in *Revue des sciences politiques*, vol. xxxvii (1917) 1-7; Waha, Raymond de, *Die National-ökonomie in Frankreich* (Stuttgart 1910) p. 103-17; Jannaccone, P., *Paolo Leroy-Beaulieu, Alfredo Marshall, Gustavo Schmoller e i loro trattati di economia politica* (Turin 1905) p. 5-24.

LESE MAJESTY. The crime of lese majesty has followed a practically uniform evolution in the law of all nations. In Roman law, where its course of development was initiated, the term *crimen majestatis populi romani imminutae* was first used principally to denote an offense against the fundamental laws of the plebs. Later the term covered in general any infringement upon the dignity of the Roman people. The sources do not permit a precise definition of the content of this political crime in Roman law; it is easier to point negatively to what Mommsen called its "juridic boundlessness." With the downfall of the Roman Republic this boundlessness became very evident, for the person of the emperor tended to become the object of the *crimen laesae majestatis*. The offense, which formerly had involved a violation of the basic rights of the plebs, grew into a crime against the absolute ruler (see Institutes, 4, 18, 3, *Lex Julia Majestatis, quae in eos, qui contra imperatorem vel rem publicam aliquid moliti sunt, suum vigorem extendit*).

The peculiarities of lese majesty, traces of which are still evident in German law and in the

law of other countries, arose during this period of development. A characteristic feature of the Germanic law is that in the criminal punishment of offenses against the commonwealth emphasis is laid upon the idea that the citizen or subject who endangers the commonwealth's safety violates the loyalty he owes to his people and to his sovereign: the political criminal is a traitor and the crime against the state is in its nature treason. The terms *Hochverrat* and *Landesverrat* in German law and high treason or treason in Anglo-American law still express this concept. A more precise delimitation of the various criminal aspects in the *crimen laesae majestatis* of Roman law and the exact definition of lese majesty in modern law evolved very slowly, and it may be said that this evolution is still far from complete. The treatment of the material in the legislation and jurisprudence of other countries has not gone much further than in those of Germany and has in fact remained behind the latter in many respects.

The juridic aspects of the crime of lese majesty can be elucidated through an examination of the German law. The crime, which was abolished by the German constitution of 1919, was formerly covered by paragraphs 94 to 97, "Libeling the Sovereign," and paragraphs 98 to 101, "Libeling Ruling Princes of Confederate States" in the German penal code of 1871. The distinction between libeling the sovereign ruler and libeling one of the princes of the confederate states was made because of the structure of the German Empire of 1871, according to which the empire had the kaiser at its head and the several states retained their own sovereignty under kings or ruling princes.

In Roman law lese majesty came under the head of high treason, whereas the German penal code (*Strafgesetzbuch*) differentiated between the two, with the intention of providing a milder penalty for less serious attacks upon the ruler's person. Aside from these considerations of juridic policy the dogmatic system of the German penal code drew a sharp line between the two offenses. Considered systematically high treason (*Strafgesetzbuch*, para. 80-87) was an attack upon the inner stability of the nation; such an attack existed when the criminal enterprise aimed to kill the sovereign or to hinder him in the exercise of his right to govern by limiting his freedom of person, by impairing his health or by any other manner of injury. Lese majesty, on the other hand, was any other attack upon the state's sovereign which did not produce a

change in the existing constitutional situation but which was directed against the person of the sovereign without directly affecting the state.

In this limited sense the concept of *lese majesty* comprises bodily injury as well as any libel of the sovereign or of a ruling prince of one of the federated states. The problem of the relationship of a libel of the sovereign to ordinary libel as covered by paragraph 185 of the German penal code was of importance in the systematic organization of German law. The problem was whether *lese majesty* was a *delictum sui generis* or an aggravated libel within the meaning of paragraph 185. A priori two types of libel of a sovereign are conceivable: libel of the ruling prince as a sovereign and libel attacking the honor of the prince as a private individual. This distinction is based upon the concept that the object of the libel is the honor of the individual; whether or not an utterance is a libel and what sort of libel it involves depend upon the identity of the person to whom the expression is directed and in what juridic capacity the injured party is affected. In the case of the sovereign in addition to his own person the dignity or reverence due him as the representative of the state may be a special target for disrespectful utterances. Whoever injures this dignity, which is by no means identical with the personal honor of the sovereign, even though one and the same utterance may injure both, injures the dignity of the state. Since *lese majesty* as a *delictum sui generis* can be directed against the dignity of the ruler only as the exponent of state power, the crime is possible properly only against the sovereign; whereas aggravated libel, which is aimed at the person, may be committed against members of the ruling house as well as the ruler himself.

The German criminal law did not protect the dignity of the sovereign as the representative of the state. In accordance with the principle *nulla poena sine lege* laid down in paragraph 2 of the penal code attacks against the respect due the sovereign could be punished only if they came under the provisions of high treason or if they libeled him as a private individual. There was no *lese majesty* in the true sense of a *delictum sui generis*; libel of the sovereign was a libel in the ordinary sense, aggravated and punished by special penalties solely because of the eminence of the injured party. In practise of course this general jurisprudential point of view was not always maintained, and because of the actual need for protecting the sovereign judicial opinions often punished injuries to his dignity as

injuries to the representative of the state, by extending the interpretation of the provisions of the penal code.

Other offenses covered by the law under the heading "Libel of the Sovereign or of a Ruling Prince of One of the Confederate States" were "acts of violence" directed against the kaiser, sovereign rulers or ruling princes of confederated states as well as against members of a ruling house (*Strafgesetzbuch*, para. 94-101). Acts of violence in the sense of this section of the code included all deliberate attacks directed upon the life, freedom or honor of another, in so far as the attack consisted of actions aimed against the body. *Lese majesty* thus comprised murder and attempted murder of the kaiser or the ruler of one of the confederated states as well as plots to imprison a ruler or to deliver him over to the enemy (*Strafgesetzbuch*, para. 80 and 81, no. 1), all of which also come under the offense of high treason. Premeditation in the case of *lese majesty* was identical with that in simple libel, but the offender in the former had also to know that his libelous attack was aimed against a person protected by the special provisions. The memory of deceased sovereigns enjoyed no special protection; offenses against it were covered by paragraph 189 of the penal code.

The severity of the penalty for *lese majesty* was graduated according to the intensity of the constitutional bond between the party injured and the offender. It varied from life imprisonment at hard labor for acts of violence against the kaiser, the offender's own sovereign or the sovereign of the German state in which he resided to imprisonment or confinement in a fortress for one week or more as the minimum penalty for libeling a member of the ruling house of another German state.

With the abolition of the constitution of 1871 through the revolution of 1918 the paragraphs of the penal code concerning *lese majesty* have become null and void. Since the establishment of a republic and of the republican form of government in the various states the *Reichspresident* has taken the place of the kaiser, while in the several states the monarch's duties have been taken over by the state governments. Protection of officials representing the state is laid down in the Law for the Protection of the Republic (1930). Paragraph 3 of this law makes provision for the imprisonment of anyone attacking or conspiring to attack the life or body of the *Reichspresident* or of a member of the Reich or state cabinets. Paragraph 5 provides a fine and

imprisonment for anyone publicly slandering the constitutional form of government by insulting or slandering the officials named in paragraph 3 as well as for anyone calumniating or slandering a deceased *Reichspresident* or a deceased member of a cabinet with respect to his public office. Thus the governmental officials as the representatives of the state are afforded special protection in contrast to the lese majesty provisions of the old code. With these new provisions the development of the law concerning offenses against the sovereign turns back in a certain sense to its point of departure, the Roman law. The libel of the president of a republic, however, is not to be regarded as lese majesty in the sense of the modern monarchical concept of the law. The 1927 draft of a German criminal code which is not yet in effect provides in paragraph 101 a corresponding section on public calumny of the republican form of government or of constitutional public bodies.

In other countries the law of lese majesty, likewise based on Roman law, arrived at provisions similar to those of the German law. No essential differences are found between the provisions in Great Britain, Holland and the Scandinavian countries; everywhere lese majesty is a crime. In English law, according to Stephen, "Every one commits a misdemeanor who is guilty of any contempt against the person of His Majesty, or his royal dignity, by means of any contumelious, insulting, or disparaging words, acts, or gestures" (*A Digest of the Criminal Law*, art. 83). But although lese majesty is a crime in England, British legal practise in principle opposes prosecution for it, just as it in general opposes prosecution for political activities. Moreover the monarchy is so firmly rooted in England that direct or indirect attacks upon that institution or upon the monarch himself are rare, and when they do occur public disapproval proves a sufficient punishment.

In systems of jurisprudence based upon an enlightened and firm patriotism penalties for lese majesty in the monarchical state and for similar crimes in republics cannot be dispensed with. The loyalty to the commonwealth so deeply impressed upon the consciousness of all citizens, however, leads to a general disapproval of offenders which becomes a greater and more impressive penalty than any possible sentence.

FRITZ VAN CALKER

See: TREASON; LIBEL AND SLANDER; MILITARY DESERTION.

Consult: Schisas, P. M., *Offences against the State in*

Roman Law (London 1926), especially ch. i; Mommsen, T., *Römisches Strafrecht* (Leipsic 1899) bk. v, ch. i; Barsanti, P., "Dei delitti politici in Roma" in *Rivista penale*, vol. xxvi (1887) 5-18; Kuhn, F. J., *Betrachtungen über Majestäten und Majestäts-Beleidigungen der römischen Kaiserzeit* (Munich 1901); Callewaert, C., "Les premiers Chrétiens et l'accusation de lèse-majesté" in *Revue des questions historiques*, vol. lxxvi (1904) 5-28; Sackur, Ernst, "Ein römischer Majestätsprozess und die Kaiserkrönung Karls des Grossen" in *Historische Zeitschrift*, vol. lxxxvii (1901) 385-406; Kellner, O., *Das Majestätsverbrechen im Deutschen Reich bis zur Mitte des 14. Jahrhunderts* (Halle 1911); Borch, Leopold von, *Einfluss des römischen Strafrechts auf Gefolgschaft und Majestätsverletzung in Deutschland* (Vienna 1889); Frederichs, W., *Die Anwendung der allgemeinen Grundsätze über Beleidigungen speziell auf Majestätsbeleidigungen* (Greifswald 1897); Calker, F. van, "Hochverrat und Landesverrat. Majestätsbeleidigung" in *Vergleichende Darstellung des deutschen und ausländischen Strafrechts, Besonderer Teil*, vol. i (Berlin 1906) p. 1-112, especially p. 1-6, 91-112; Doehn, B., "Der Begriff der Majestätsbeleidigung und ihr Verhältnis zur gewöhnlichen Beleidigung nach dem Reichsstrafgesetzbuch" in *Zeitschrift für die gesamte Strafrechtswissenschaft*, vol. xxi (1901) 468-536; Bleek, S., "Die Majestätsbeleidigung im geltenden deutschen Strafgesetz" in *University of Berlin, Kriminalistisches Institut, Abhandlungen*, n.s., vol. vi (1909) no. i; Brooks, R. C., "Lèse majesté" in *Bookman* (New York), vol. xix (1904) 359-72; Viaud, J., *La peine de mort en matière politique* (Paris 1902) p. 92-103, 108-114; Pella, Vespasien V., "La répression des crimes contre la personnalité de l'état" in *Académie de droit international, Recueil des cours*, vol. xxxiii (1930) 671-868, especially 689-701; Garraud, R., *Traité théorique et pratique du droit pénal français*, vols. i-v (3rd rev. ed. Paris 1913-24) vol. iii, p. 493-505; Stephen, J. F., *History of the Criminal Law of England*, 3 vols. (London 1883) vol. ii, ch. xxiii, and *A Digest of the Criminal Law* (7th ed. by H. and H. L. Stephen, London 1926) ch. vi; Bishop, J. P., *Bishop on Criminal Law*, 2 vols. (9th ed. by J. M. Zane and C. Zollmann, Chicago 1923) vol. i, p. 324-30.

LESLIE, THOMAS EDWARD CLIFFE (1827-82), Irish economist. Leslie graduated from Trinity College, Dublin, in 1847 and studied law in London under Sir Henry Maine. In 1853 he became professor of political economy and jurisprudence in Belfast.

Leslie's attitude toward economics was largely determined by his studies in jurisprudence and by the works of Comte. From Maine he had learned the importance of the historical approach in the social sciences, from Comte their essential unity and interdependence. He thus found himself more in sympathy with the extremists of the German historical school than with the followers of Ricardo. Adam Smith, he held, had derived his generalizations from historical research, thus making economics a con-

crete inductive study. In the hands of Ricardo and his school, however, it had become deductive and abstract. It was based upon two main premises, the desire for wealth and the prevalence of free competition. But the desire for wealth was "an abstraction compounding a great variety of heterogeneous motives," and economists were neglecting their chief function if they failed to analyze these motives and to show their expressions at different times and under different social conditions. Secondly, the assumption of free competition, involving the tendency to equality of wages and of profits, was grossly untrue to facts; and yet upon it depended not merely the cost of production theory of value and the postulate of a "wages fund" but also certain common beliefs about taxation. In particular, it was currently argued that taxes upon commodities must fall upon the consumers and that indirect taxes could not hurt the working classes, since a rise in the cost of living must be compensated by an equivalent rise in wages. Leslie had no difficulty in showing the error of applying these theories without qualification to the circumstances of contemporary life and advocated the abolition of all forms of indirect taxation. His general thesis regarding the uselessness of deductive reasoning in economics was rejected by such critics as Sidgwick and J. N. Keynes, who pointed out that it could not be proved merely by emphasizing the value of historical research or by appealing to the as yet rudimentary science of sociology.

Leslie himself conducted some valuable investigations into the land systems of Europe and into past and contemporary price movements. But he did not live to complete any major work theoretical or historical and his reputation really rests on his methodological essays.

LINDLEY M. FRASER

Important works: *Land Systems and Industrial Economy of Ireland, England and Continental Countries* (London 1870); "Financial Reform," in *Cobden Club Essays*, 1871-72, Second series (London 1872); *Essay in Political and Moral Philosophy* (Dublin 1879).

Consult: Ingram, John K., *A History of Political Economy* (new ed. London 1915) p. 222-25.

LESSING, GOTTHOLD EPHRAIM (1729-81), German dramatist, critic and philosopher. Lessing was born in Saxony and after theological and classical studies in Leipsic and Wittenberg lived as a journalist in Berlin and Leipsic. In 1760 he became secretary to General von Tauentzien in Breslau, in 1767 dramatic critic in

Hamburg and in 1770 librarian at Wolfenbüttel in Brunswick.

Lessing has been called by Macaulay the first European critic. Through his literary and dramatic criticism, especially the *Litteraturbriefe* (published in Berlin, 1759-65) and the *Hamburgische Dramaturgie* (2 vols., Hamburg 1767-69), as well as through the aesthetic philosophy of his *Laokoon* (Berlin 1766, new ed. 1788; tr. in *Selected Prose Works*, ed. by Edward Bell, London 1890) he did more than any other individual to liberate German letters from French domination and from the theological and Pietistic influences still present in such writers as Klopstock and Wieland. He attacked the dramatic principles of Gottsched, which were based on French rationalism with its neoclassical ideals of false propriety, and he pointed out the greatness of English literature, especially of Shakespeare. English literature, he maintained, was much closer to the German spirit than the French.

Lessing's plays embodied the freshness and freedom from imposed conventions which he dictated as a critic. In *Miss Sara Sampson* (1755) he achieved the first German bourgeois tragedy. *Minna von Barnhelm* (1767) reflects in the character of Major von Tellheim the idealism of the new bourgeois era in contrast to the deception and recklessness of the earlier order. This moral contrast is predominant in all German literature of the eighteenth century. In Lessing's great tragedy *Emilia Galotti* (1772) the contrast becomes political, court and bourgeoisie standing in hostile opposition as the old and the new. The bourgeoisie recognizes the new virtues of the century as its own and the social unscrupulousness which indulges in cabals and intrigue as belonging to and being caused by the courtly circles. In this play one is already aware of the far off thunder of the coming revolution of the bourgeoisie against the absolutism of the court.

In 1774 Lessing began the publication of excerpts from a work of Hermann Samuel Reimarus which were later collected and republished as *Fragmente des wolfenbüttelschen Ungenannten* (Berlin 1784; tr. by C. Voysey, London 1879). These writings, a fierce deistic attack on revealed religion and on the Bible as an inspired book, aroused a storm of protest against Lessing even from the more liberal theological circles. Lessing although not wholly in sympathy with the views of Reimarus brilliantly defended the right of free inquiry in the problems of religion as opposed to the complacency of institutional posi-

tivism. He never definitely formulated his own religious philosophy, but his ideas on religion, on toleration and on general social and political problems received their fullest elaboration in his last drama, *Nathan der Weise* (1779), probably the noblest achievement of the German Enlightenment, in his *Ernst und Falk* (2 vols., Göttingen and Frankfurt 1778-80) and in his *Erziehung des Menschengeschlechts* (Berlin 1780, 2nd ed. 1785; tr. by F. W. Robertson, 4th ed. London 1896). In opposition to the deistic concept of natural religion Lessing approached the history of religions from the thesis of historical development and in this way exerted considerable influence on the subsequent study of comparative religion. He held that religion is not mere blind faith but is a result of an inner experience and finds its true expression in active morality which is valued for its own sake. No positive religion can be considered intrinsically superior to any other. Divisions of religion as well as of class and state are necessary evils that are to be overcome by the ideal of humanity. Mankind's progress is possible only through the striving for truth. The traditional Enlightenment concepts of the best of all possible worlds and the consequent duty of man to submit to God created conditions are no longer accepted without question. Lessing doubts, and instead of the complacent optimism which characterized the period there runs through his work a trail of skepticism and intellectual inquiry which are of enduring significance no matter how remote his explicit preoccupations may become to later ages. He was probably the most important influence in eighteenth century Germany in awakening a new consciousness of the problems of the modern world.

FRITZ BRÜGGEMANN

Works: The best editions of Lessing's works are those by Julius Petersen and Waldemar von Olshausen, 25 vols. (Berlin 1925-29), and by K. Lachmann, 24 vols. (3rd ed. by F. Muncker, 1886-1924). His plays are translated as *Dramatic Works*, ed. by E. Bell, 2 vols. (London 1878).

Consult: Schmidt, Erich, *Lessing, Geschichte seines Lebens und seiner Schriften*, 2 vols. (4th ed. Berlin 1923); Danzel, T. W., and Gubrauer, G. E., *Lessing*, 2 vols. (2nd ed. Berlin 1880-81); Oehlke, W., *Lessing und seine Zeit*, 2 vols. (2nd ed. Munich 1929); Sime, James, *Lessing*, 2 vols. (new ed. London 1896); Francke, Kuno, *A History of German Literature as Determined by Social Forces* (4th ed. New York 1901) p. 265-300; Biedermann, Karl, *Deutschland im achtzehnten Jahrhundert*, 2 vols. (Leipzig 1854-80) vol. ii, pt. ii, p. 240-359, and vol. iv, p. 478-500; Dilthey, Wilhelm, *Das Erlebnis und die Dichtung* (9th ed. Berlin 1924) p. 17-174; Wiese, Benno von, *Lessing: Dichtung,*

Asthetik, Philosophie (Leipzig 1931); Schrempf, Christof, *Lessing als Philosoph* (2nd ed. Stuttgart 1921); Fittbogen, Gottfried, *Die Religion Lessings* (Leipzig 1923); Kettner, Gustav, *Lessings Dramen im Lichte ihrer und unserer Zeit* (Berlin 1904); Brüggemann, Fritz, "Lessings Bürgerdramen und der Subjektivismus als Problem, Psychogenetische Untersuchung" in *Freies deutsches Hochstift, Jahrbuch* (Frankfurt 1926) p. 69-110; Mann, Georg, "Lessings Pädagogik" in *Pädagogisches Magazin*, no. 1000 (1929); Leisegang, Hans, *Lessings Weltanschauung* (Leipzig 1931).

LETELIER, VALENTÍN (1852-1919), Chilean jurist and sociologist. Letelier was professor of administrative law at the University of Chile from 1888 to 1911 and rector from 1906 to 1911. He was the finest representative of positivist science in Chile and one of the teachers who have in the present century contributed most toward the development of higher learning in education, history, law, political science and sociology. As secretary to the Chilean legation at Berlin he obtained much information regarding educational organization, which he incorporated in several pamphlets. His *Filosofía de la educación* (Santiago, Chile 1892, 2nd ed. 1912), in which he stresses scientific education as the only possible basis for general culture, had a profound influence upon educational criteria in Chile and in other Latin American republics. In his major work concerning historiography, *La evolución de la historia* (first published as *Por qué se rehace la historia?*, Santiago, Chile 1886, 2nd ed. 1900), Letelier examined various sources in order to establish the proper foundations on which historical method should be based and demonstrated the value to sociology which history scientifically reconstructed would acquire. In his teaching he contributed greatly to the modernizing of legal studies with regard to both method and subject matter. He pointed out also the necessity for positivistic methods in the study of political science, holding that devotion to ideologies was the cause of the instability of American democracies. In national politics he sided with the radical groups. An exposition of his ideas on these questions is to be found in *La lucha por la cultura* (Santiago, Chile 1895). *Génesis del estado* (Buenos Aires 1917) and *Jénesis del derecho* (Santiago, Chile 1919), which constitute his main contributions to sociology in both its political and juridical aspects, have earned him well deserved fame. Although not wholly original they nevertheless present generalizations regarding matters not thoroughly defined previously in sociological terms—the active influence upon the state of its population,

territory and cities; the origins and development of contracts, of the law of inheritance, criminal and adjective law—all on the basis of a belief that sexual promiscuity and community of goods characterized society in its most primitive form. The conclusions are supported by rigorously inductive methods and vast erudition; noteworthy is the utilization of materials relating to the New World, sources to which European sociologists had not given much consideration.

LUIS GALDAMES

Other important works: *El hombre antes de la historia* (Copiapó 1877); *Las escuelas en Berlín* (Santiago, Chile 1885); *La instrucción secundaria y la instrucción universitaria en Berlín* (Santiago, Chile 1885), in collaboration with Claudio Matte; *De la ciencia política en Chile* (Santiago, Chile 1886). He also edited *Sesiones de los cuerpos legislativos de Chile, 1811-1845*, 37 vols. (Santiago, Chile 1886-1908).

Consult: Fuenzalida Grandón, A., "Don Valentín Letelier y su labor intelectual" in *Información*, vol. iv (1919) 52-56, tr. in *Inter-America* (English ed.), vol. iii (1919-20) 112-20; Encina, F. A., "Valentín Letelier, el profesor" in *Revista chilena*, vol. viii (1919) 233-42; Ubéda Escobar, Carlos, "Bosquejo de la labor pedagógica de don Valentín Letelier" in *Universidad de Chile, Anales*, 2nd ser., vol. ii (1924) 647-703, 1005-43, 1277-1367; Dávila Silva, R., "Los orígenes de la familia en la sociología de don Valentín Letelier," "La familia y la propiedad" and "El origen de la propiedad" in *Revista chilena*, vol. ix (1919-20) 12-25, 251-67 and 379-400.

LE TROSNE, GUILLAUME FRANÇOIS (1728-80), French economist. Le Trosne was king's attorney at the Présidial of Orléans. His early interest was in natural law, but he was soon attracted to the study of economics and became one of the most lucid exponents of the physiocratic doctrine; his views express most clearly the evolution of the school. At first an enthusiastic, inflexible adept of the abstract physiocratic system, he nevertheless evidenced a preference for practical questions, as reflected in his *La liberté du commerce des grains, toujours utile et jamais nuisible* (Paris 1765). Later coming in contact with the detail of fiscal problems he was led to modify the rigidity of the doctrine through recognition of the historical and geographical limitations in the practical application of the principles. He realized that the establishment of the single tax on land would require several years, and he accepted as temporary expedients the maintaining of certain special agricultural land taxes and of the personal *taille* on farmers, provided it be fixed; the creation of a supplementary tax to be paid by the large cities; and even the survival of import duties on foreign

merchandise. Only in politics did he remain obstinately faithful to absolutism—the provincial assemblies which he recommended were to provide only a very restricted administrative competence—and hostile to democracy, that "bizarre and monstrous" government which he doubtless pictured in the form of the violent popular demonstrations against the dealer in wheat or as personified by the vagabonds who had set fire to one of the farms of the magistrate.

G. WEULERSSE

Works: *Discours sur l'état actuel de la magistrature, avec des notes économistes* (Paris 1764); *De l'intérêt social* (Paris 1777); *De l'ordre social* (Paris 1777); *De l'administration provinciale, et de la réforme de l'impôt* (Basel 1779).

Consult: Mille, J., *Un physiocrate oublié* (Paris 1905).

LETTRE DE CACHET. *See* CACHET, LETTRE DE.

LEUBER, BENJAMIN (died 1675), German cameralist. Leuber studied at Leipsic and later was appointed Kammer-Prokurator in Lusatia. In this capacity he participated in the task of monetary reconstruction, the most burning issue of the day in Germany. Leuber's chief work, *Ein kurzer Tractat von der Münze* (2 vols., Jena 1623—Halle 1624), influenced the direction of the later development of German political doctrine. He sharply opposed the Roman law concept of the state dominant in his day, which limited the state's function to that of maintaining law and order, and he insisted that the state assume economic functions. He thus became the founder of the doctrine of the welfare state, which was the point of departure for the rise of mercantilism in Germany and furnished fertile soil for the development of subsequent economic thought. His *Tractat* contains the first attempt in German literature to formulate a monetary theory. According to Leuber money developed out of the most marketable commodity; yet he emphatically denies the commodity character of money and develops and separates the concepts of nominal value and intrinsic value, considering the latter as incidental and of only genetic significance and clearly recognizing the function of money as a universal standard of value. Had Leuber's work not fallen into oblivion, the later cameralists might have been able to construct their monetary theories on a foundation which they worked two centuries to create and which in reality they never completely achieved. Leuber was the author of several other books dealing with monetary as well as general eco-

conomic problems, all of which have apparently been lost.

PETER K. H. WESSELY

Consult: Wessely, P. K. H., in *Schmollers Jahrbuch*, vol. lii (1928) 985-1019.

LEVASSEUR, PIERRE ÉMILE (1828-1911), French historian and economist. Levasseur studied at the École Normale Supérieure. For a time he taught in a *lycée* and in 1868 he was put in charge of a course in economic history and history of economic doctrines at the Collège de France, where in 1872 he became professor of geography, history and economic statistics; he also taught at the Conservatoire National des Arts et Métiers.

Levasseur commenced his scientific career with the study *Recherches historiques sur le système de Law* (Paris 1854), which won him the *doctorat ès lettres*. This was the first thesis offered on a subject of this kind in France; before Levasseur only Augustin Thierry and Michelet had applied the historical method to the study of economic phenomena. In 1858, when the discoveries of gold deposits threatened gold with demonetization, Levasseur wrote *La question de l'or* (Paris 1858). A year later he published his main work, *Histoire des classes ouvrières en France depuis la conquête de Jules César jusqu'à la Révolution* (2 vols., Paris; 2nd ed. with title *Histoire des classes ouvrières et de l'industrie en France avant 1789*, 1900-01), which was followed in 1867 by a *Histoire des classes ouvrières en France depuis 1789 jusqu'à nos jours* (2 vols., Paris; 2nd ed. with title *Histoire des classes ouvrières et de l'industrie en France de 1789 à 1870*, 1903-04). Although it may be criticized as to method, details of documentation and occasional overhasty generalization it is a monumental study indispensable to the student of French economic history. The same, however, cannot be said for his *Questions ouvrières et industrielles en France sous la troisième République* (Paris 1907) or for his *Histoire du commerce de la France* (2 vols., Paris 1911-12). Levasseur was a member of the Académie des Sciences Morales et Politiques and prefaced its edition of the *Ordonnance des rois de France, règne de François 1^{er}* (2 vols., Paris 1902-16) with a study of money in the sixteenth century, which was separately reprinted as *Mémoire sur les monnaies du règne de François 1^{er}* (Paris 1902).

HENRI HAUSER

Other important works: *La population française*, 3 vols. (Paris 1889-92); *L'agriculture aux États-Unis* (Paris

1894); *L'ouvrier américain*, 2 vols. (Paris 1898), tr. by T. S. Adams and ed. by T. Marburg, 1 vol. (Baltimore 1900). For Levasseur's method and scope in teaching economics, see his articles "Trente-deux ans d'enseignement au Collège de France", and "L'enseignement de l'économie politique au Conservatoire des Arts et Métiers" in *Revue internationale de l'enseignement*, vol. xl (1900) 5-25, and vol. xli (1901) 211-28, 294-305 and 385-99.

Consult: Liesse, André, "Notice sur la vie et les travaux de M. Émile Levasseur" in Académie des Sciences Morales et Politiques, *Séances et travaux . . . compte rendu*, vol. clxxxi (1914) 337-61; Guyot, Yves, in *Journal des économistes*, 6th ser., vol. xxxi (1911) 123-24, 177-97; Marion, Marcel, "Faits économiques et sociaux" in *Revue politique et littéraire*, vol. li, pt. i (1913) 146-50, 164-69; Espinas, Georges, in *Vierteljahrsschrift für Social- und Wirtschaftsgeschichte*, vol. i (1903) 146-57.

LEVELLERS. It is difficult to establish the exact origin of the term leveller, which in a general sense may be applied to anyone attempting to overthrow existing barriers. As early as 1607 it was used with reference to the peasantry who threw down enclosures in the Midlands, but it was not until Charles I and Cromwell first designated the Interregnum democrats as Levellers that it acquired the precise connotation which has persisted.

The progress of the Leveller movement was due in the main to three factors: the triumph of the less orthodox and more democratic form of Puritanism known as Independency, the position attained by the army in 1647 and the indomitable leadership of John Lilburne. The victory of Independency cleared the way for widespread criticism of established forms of government, secular as well as ecclesiastical. The Independents were taxed with having cast all mysteries and secrets of government before the vulgar and with teaching both people and soldiery to criticize government in the light of first principles. By 1647 the army, which was predominantly Independent in opinion, was in a position of considerable political power; levelling doctrines spread rapidly among its members, particularly among the rank and file, who in cooperation with civilian Levellers drew up the Agreement of the People. From this document, presented to the House of Commons in January, 1648-49, it is possible to form a fairly clear idea of the Levellers' political demands, which despite subsequent amplifications and extensions remained essentially unchanged.

The starting point in Leveller theories was the inalienable nature of individual rights. Richard Overton in *An Arrow against All Tyrants and*

Tyranny (1646) declares that "to every Individuall in nature, is given an individuall property by nature, not to be invaded or usurped by any." Directly deducible from this was the principle of popular sovereignty, which was given its formal expression in the declaration contained in the Fundamental Lawes and Liberties of England (1653) that the people of England are the "sole original" of the authority of Parliament and army and have "all Law and Authority within themselves." The Agreement of the People although containing no such general statement attempts to translate the principle into practise by the introduction of constitutional reforms. To the end that Parliament might be truly representative a reform of the franchise and a redistribution of seats in accordance with the density of population were demanded; the representative assembly must meet every two years, and the electorate must consist of all native Englishmen of twenty-one years and over who are of sufficient economic substance to be "housekeepers" and to be assessed toward the relief of the poor.

From the doctrine of the sovereignty of the people proceeds the most distinctive although not the most enduring contribution of the Levellers to English political thought: their insistence on the doctrine of reserved powers, powers so fundamental and sacred that they must be removed from the control of the elected assembly. This conception of fundamental law, eventually to become alien to the English constitution, was not uncommon during the Interregnum. Men of varied opinions agreed that the constitution should be safeguarded by more rigid means than had prevailed. Cromwell declared his belief in certain fundamentals which should be beyond the power of Parliament to alter. The Agreement of the People restating in explicit terms this doctrine of fundamental powers makes provision for the vigorous curtailment of the jurisdiction of the elected assembly. Religion is removed entirely from its sphere, and fundamental principles are laid down for religious governance. In the same spirit the elected assembly is forbidden among other things to force citizens to serve in a military capacity abroad or to exempt individuals from the power of the laws.

A third feature of the Levellers' political program was the doctrine of the separation of powers. The Agreement of the People forbids any member of a council of state, any army officer, treasurer of public money or practising lawyer

to sit in the elected assembly. *England's New Chains Discovered* (1648-49) states in general terms that it is "an occasion of much partiality, injustice and vexation to the people, that the Law makers should be Law executors."

Although the program of the Levellers remained, in contrast to that of the Diggers, predominantly political in character it gradually came to include a number of social and economic reforms. The latest edition of the Agreement of the People (May, 1649) shows a distinct advance in that direction. The important monopolies of the trading companies were declared to be contrary to the rights of Englishmen to trade freely beyond the seas. Lilburne waged a vigorous warfare against the Merchant Adventurers, toward whom he bore a special grudge; and Walwyn, sometimes suspected of being the most revolutionary of the Levellers, fought the privileges of the Levant Company. The reform of the law both civil and criminal was demanded, particularly the reform of the law of debt and the abolition of capital punishment except for murder. Excise and customs were attacked as weighing heavily on the poor and "middle sort" of people and causing obstruction of trade, and the employment and care of the poor were insisted upon. In their criticism of certain features of the existing land laws the Levellers approached the Diggers most closely. Primogeniture and copyhold were censured, and the *Case of the Armie Truly Stated* (1647) insisted that the "antient rights belonging to the poore," such as rights of common, should be restored.

Cromwell, despite his toleration of many varieties of opinion, condemned the Levellers' proposals on account of their doctrinaire and revolutionary character. Ireton likewise strongly opposed their program, realizing more clearly than did the Levellers themselves that a political constitution founded on the inalienable rights of the individual might lead to revolutionary criticism of the existing economic and social order. The conservative elements of the time were anxious to identify the Levellers with the "True Levellers," or Diggers, and thus to rally a powerful opposition against both. But while it may be argued that advanced political democracy must perhaps unconsciously pave the way for advanced economic democracy, it is not possible to trace a definite connection between the Levellers and the Diggers. The Levellers' doctrines were individualistic, mainly political and secular; those of the Diggers were communistic, mainly social and economic, and strongly religious.

There was, so far as is known, no connection in personnel between the two bodies. The Levellers disclaimed all responsibility for the Diggers' doctrines, and in the Agreement of the People the power to level estates was removed from the competence of the elected assembly.

In the matter of numbers, organization and tactics the Levellers appear to have been far superior to the Diggers. In April, 1649, the members of the Council of State were informed that Winstanley, Everard and their little band of followers had begun to dig up the land on St. George's Hill in Surrey. Winstanley and Everard outlined a utopian program, which they refused, however, to back up with any kind of physical force. Throughout the summer of 1649 the Diggers remained at work on St. George's Hill, but in the autumn a party of soldiers was dispatched to break up their settlement.

The importance of the Diggers lies almost entirely in the realm of theory. In their efforts to eliminate social and economic inequalities, particularly in the ownership of land, they pointed out the inadequacy of political democracy without economic democracy. England would never be a free commonwealth, they maintained, until all the poor commoners had access to the land. The abolition of private ownership in land would improve relations between individuals and between nations and pave the way for widespread social reforms. In one respect the Diggers were more representative of their time than the Levellers, for their theories were saturated with a type of religious mysticism which bore affinities to contemporary Quakerism. Gerrard Winstanley in his *A New-Year's Gift for the Parliament and Armie* (1650) says that men jeer at the name of Leveller, but "I tell you Jesus Christ, Who is that powerfull Spirit of Love, is the Head Leveller."

The utopia described in unprecise terms by Winstanley (*The Law of Freedom in a Platform*, 1652) represents a vague type of communism. Everyone is to work in cooperation at the task of planting and reaping and the fruits of his labors are to be deposited in storehouses, from which individuals may fetch supplies. The question of education is considered in detail; Winstanley insists that every child must learn some manual trade, as the exclusive devotion to book learning of any one class leads to presumption and domination. The political machinery of this utopia is rather shadowy and is clearly regarded as less important than the social and economic organization. Fathers of families and "overseers"

look after the general welfare of the people. Parliament is retained, but as a court of equity rather than as a legislative assembly. The soldiers are also magistrates and one of their most important duties is the supervision of criminals, who are regarded as erring members of society rather than as outcasts.

The Leveller and Digger movements have often been too lightly dismissed as early passing phenomena of a stormy period. The influence of both was important in the long run rather than in the immediate future. There is evidence that Lilburne and his followers had a direct influence on Hone and the radicals of the early nineteenth century, while Robert Owen through John Bel-lers was influenced by the history and theory of the Diggers. It seems justifiable to say that the Levellers and the Diggers sowed the first seeds in England of modern radicalism and modern communism.

M. JAMES

See: AGREEMENT OF THE PEOPLE; COMMUNISM; ANARCHISM; SOCIAL CHRISTIANITY.

Consult: Gooch, G. P., *English Democratic Ideas in the Seventeenth Century*, ed. by H. J. Laak (and ed. Cambridge, Eng., 1927) chs. iv and vi; Bernstein, E., *Sozialismus und Demokratie in der grossen englischen Revolution* (4th ed. Berlin 1922), ff. by H. J. Stanning as *Cromwell and Communism* (London 1920); Price, T. C., *The Leveller Movement* (Washington 1926); Berens, L. H., *The Digger Movement in the Days of the Commonwealth* (London 1926); Connolly, Alexander, *Anfänge der Demokratie in England; Studien zur Geschichte der Levellerbewegung* (Berlin 1920); Kottler, W. W., *Der Rätegedanke als Staatsgedanke, Einziges rechtswissenschaftliche Studien*, vol. xv, vol. 1 (Leipzig 1925-) vol. 1, ch. iv; James, Margaret, *Social Problems and Policy during the Puritan Revolution 1640-1660* (London 1930); Freund, M., *Die Idee der Toleranz im England der Grossen Revolution* (Halle 1927) p. 268-74.

LEVERHULME, VISCOUNT, WILLIAM HERBERT LEVER (1851-1925), British industrialist. Entering his father's wholesale grocery in 1862 he helped expand its trade well beyond its original compass and by 1884 was ready to retire or to specialize on the wider marketing of some article, he finally decided almost accidentally on soap.

From the beginning he pioneered by producing in large quantity a staple article of good quality to sell at a low price under an attractive registered label. In addition he devoted much attention to advertising and industrial research. Within two years after its establishment in 1885 the manufacturing works at Warrington proved too small and Port Sunlight was begun. It be-

came far more than a soap works. Lever made it a model industrial village with homes for its workers, well paved roads, schools and community centers. The empire of Sunlight Soap had laid its corner stone. Its development proceeded along well defined lines: horizontally, by the purchase and construction of associated works throughout the globe; vertically, by world wide acquisition of raw materials and other ingredients necessary for soap manufacture.

It was in the realm of labor relations that Leverhulme won his widest popular recognition. Motivated by a creed of enlightened self-interest he assured his workers at Port Sunlight a notable degree of security and decency in living and working conditions. Port Sunlight was not the first model industrial village in England, but it remains the chief forerunner in large scale town planning entirely for the workers of one plant. Always convinced of the efficiency of a shorter working day, Leverhulme was a pioneer in the introduction of the eight-hour day and an early advocate of a six-hour day. Provision was made for industrial education by schools and colleges, which became constituent parts of the Port Sunlight works, with periods for study granted from the workday. Other features were profit sharing (without, however, management sharing), old age pensions, group life insurance, half pay sickness allowance and unemployment benefits supplementing state benefits to assure the workers half pay during involuntary layoff. Leverhulme accepted high wages as an essential of a highly productive economy.

B. M. SELEKMAN

Works: The Six-hour Day and Other Industrial Questions (London 1918, 2nd ed. by Stanley Unwin 1919), abridged as *The Six-hour Shift and Industrial Efficiency* (New York 1920).

Consult: Leverhulme, William Hulme Lever, Viscount Leverhulme (London 1927).

LEVI, LEONE (1821-88), English economist, statistician and jurist. Levi, who was born in Ancona in the Papal States, came in 1844 to Liverpool, where he engaged in commerce and was naturalized. He combined theoretical and practical activity in the fields of business and politics and was instrumental in effecting many reforms, all centering around his major interest of promoting commerce through the improvement of international relations. He aided the formation of chambers of commerce in Liverpool and other industrial centers. His *Commercial Law, Its Principles and Administration* (2 vols.,

London 1851-52) is a pioneer work in comparative law based on a study of the legal systems of sixty countries; it had considerable influence on British legislation. He strongly urged commercial arbitration in his book *On the State of the Law of Arbitrament and Proposed Tribunals of Commerce* (London 1850). The legislation of 1854 on this subject was influenced by him. His interest in international peace led him into both the more general field of international law and such specific proposals as a council of international arbitration, to which nations were to elect delegates and which would use moral authority to settle disputes and prevent war. He made a statistical study of the economic and class distribution of taxation and urged that it be placed on a more equitable and revenue yielding basis. Levi was concerned also with justice to the wage earner; his book *Wages and Earnings of the Working Classes* (London 1867) is a comprehensive survey based upon statistical and other material from official sources, in which he made some of the earliest estimates of real wages, insisted that lower hours of labor "have increased, not diminished, production" and urged arbitration of labor disputes. His chief work was his *History of British Commerce and of the Economic Progress of the British Nation, 1763-1870* (London 1872, 2nd ed. rev. to 1878, London 1880), a pioneer work in business history. Levi made considerable use of statistics, to the development of which he contributed notably; he consistently endeavored to relate theory and argument to the available statistical material. He edited the monumental statistical summary of parliamentary papers, *Annals of British Legislation*, of which fourteen volumes were published in 1856-65 and four supplementary volumes a few years later. Levi was a professor of commercial law at King's College, London, a member of the bar of Lincoln's Inn and also a representative of the Royal Statistical Society at several European congresses.

NATHAN ISAACS

Other important works: Chambers and Tribunals of Commerce (London 1849); *On Taxation: How It Is Raised and How It Is Expended* (London 1860); *Manual of the Mercantile Law of Great Britain* (London 1854); *Report on Technical, Industrial and Professional Instruction in Italy and Other Countries*, Great Britain, Parliament, Sessional Papers, vol. liv (1867-68) no. 33; *International Law, with Materials for a Code of International Law* (London 1887); *Work and Pay; or Principles of Industrial Economy* (London 1877); *The Story of My Life, the First Ten Years of My Residence in England, 1845-55* (p. p., London 1888).

Consult: Royal Statistical Society, Journal, vol. li

(1888) 340-42; Hug, W., "History of Comparative Law" in *Harvard Law Review*, vol. xlv (1931-32) 1027-70.

LEVY LAWSON FAMILY, British journalists. Three generations of this family have been identified with the *London Daily Telegraph*. Joseph Moses Levy (1812-88), educated under Thomas W. Hill and in Germany, became in 1855 proprietor of the *Sunday Times*. Two months after the founding of the *Daily Telegraph* on the repeal of the newspaper stamp tax in 1855 Levy, who had been its printer, acquired it in payment of a debt. He at once reduced its price to one penny thus making it the leader of the new "cheap press." His business acumen and the journalistic flair of his son Edward (1833-1916) enabled the *Telegraph* to struggle on until, with the repeal of the excise on paper in 1861, it established itself on a firm financial basis. By 1871 "Jupiter Junior," as the *Telegraph* was dubbed with a hint of its rivalry with the *Times*, had a circulation of 200,000, treble that of the "Thunderer" itself. In 1885 Edward Levy, known since 1875 as Levy Lawson (Lawson was the name of an uncle) took over sole control of the paper. An ardent supporter of Gladstone until 1878, he then opposed the Liberal policy on Turkey and Ireland and was thenceforth an advocate of imperialism and a strong navy. In 1903 Levy Lawson, now Lord Burnham and regarded as the dean of English journalism, retired. The *Telegraph* passed to his son Harry Levy Lawson (1862-), First Viscount Burnham, who sold it in 1928.

The *Telegraph*, decried by Matthew Arnold as the quintessence of rowdy Philistinism, was the greatest English journalistic success of its generation. Sacrificing dignity for vivacity and "human interest" it proved that "news" was not of necessity a heavy or serious matter. It cultivated a conversational style ("Telegraphese"), exemplified by G. A. Sala's writing; was not ashamed of emotion, whether tender or chauvinistic; and was an innovator in catering to women. Under the first Lord Burnham the *Telegraph* in conjunction with the *New York Tribune* sent Stanley to complete Livingstone's work in Africa, it raised famine and war relief funds and in general, as the *enfant terrible* of journalism, prepared the way for Northcliffe and a later journalistic revolution, which it managed to survive.

H. DONALDSON JORDAN

Consult: *Daily Telegraph* (London), October 13, 1888,

and January 10, 1916; *Times* (London), January 10, 1916; Rhode, Dyke, "Social Relationships of the 'Daily Telegraph'" in *New Century Review*, vol. iii (1898) 265-68; Bourne, H. R. Fox, *English Newspapers, Chapters in the History of Journalism*, 2 vols. (London 1887) vol. ii, p. 235-37; Arnold, Matthew, *Friendship's Garland* (London 1871); Raymond, E. T. (Thompson, E. R.), *Uncensored Celebrities* (London 1918) p. 203-07; Firth, J. B., in *Spectator*, vol. cxvi (1916) 106-07.

LEWIŃSKI, JAN STANISLAW (1885-1930), Polish economist and sociologist. Lewiński was professor at the School of Higher Commercial Studies in Warsaw. Early in his career he became interested in economic history. He believed that increase of population offers the most important clue to the explanation of economic development and attempted to provide an inductive affirmation of this thesis in his books *L'évolution industrielle de la Belgique* (Instituts Solvay, Études sociales, no. vii, Brussels 1911) and *The Origin of Property* (London School of Economics and Political Science, Studies in Economics and Political Science, no. xxx, London 1913). In the former he concluded that increase of population was the most powerful factor in bringing about the industrialization of Belgium; in the latter he showed that increase of population and consequent scarcity of land forced the transition from nomadism to settled agricultural life, which inevitably led to the rise of private property.

Later Lewiński turned his attention to problems of money and credit. He attacked the logical validity of the quantity theory of money and opposed the view of leading contemporary economists who believed in the possibility of stabilizing the general price level through central bank action. According to Lewiński the influence is in the opposite direction: from price movements to the volume of credit. He pointed out further that the theory of price control through the control of credit had as yet found no empirical confirmation and maintained that the possibilities of price control by the banks or emission are especially limited during periods of depression. While essentially a follower of classical economics, Lewiński viewed with skepticism the achievements of the newer economic theory.

ADAM KRZYŻANOWSKI

Other important works: *Twórcy ekonomji politycznej*, Biblioteka Uniwersytetu Lubelskiego, Wydział prawa i nauk społeczno-ekonomicznych, no. i (Lublin 1920); tr. as *The Founders of Political Economy* (London 1922); *Zasady ekonomji politycznej* (Principles of political economy) (Warsaw 1923); *Money, Credit and Prices* (London 1929).

LEWIS, SIR GEORGE CORNEWALL (1802-63), English scholar, statesman and political theorist. Through his Oxford education Lewis was turned toward the classics. At the age of twenty-five he was able to pursue his interests through classical, German, French and Italian literatures. One of his first publications was a small treatise on the unsatisfactory state of the terminology of political science, which was followed by a number of scholarly articles in various English periodicals. By reason of a lengthy and varied political experience upon commissions of inquiry, in Parliament and through the holding of several cabinet portfolios Lewis' attention was increasingly devoted to political theory. His work on the government of dependencies and his inquiry into the influence of authority in matters of opinion appeared at times contemporaneous with the importance of questions of colonial policy and Chartist agitations respectively. His mature work, however, remained to be incorporated in the two-volume treatise on methods of observation and reasoning in politics. Before Lewis became active in politics he came to the conclusion that government was a matter of contrivance and design, capable of improvement by intelligent men. In holding this idea he was unquestionably influenced and supported by personal contact with John Austin and J. S. Mill as well as by his vast reading. Particularly did Austin's analytical methods leave their mark upon him. He found, however, that precision and intelligent direction could not be so easily applied in the solution of concrete problems of government. This difficulty could be overcome only by the establishment of political science upon sound foundations, and it could not be so established until its theoretical basis was worked out. Impressed by the progress that had been made in the physical sciences and by Bacon's ideas and meanwhile integrating his speculations on certain aspects of history and historical method, Lewis set to work upon a comprehensive treatise on the content and methodology of political science. He defined the content as "the nature and acts of a government, and the acts and relations of men as determined by, or affecting, the government." He applied his method of precise definitions and analysis. The most original part of the treatise deals with the relation of history to politics and the extent of the possible application of physical science methodology in politics.

J. G. HEINBERG

Important works: *Remarks on the Use and Abuse of*

Some Political Terms (London 1832), reprinted with notes and appendix by R. K. Wilson (Oxford 1877); *An Essay on the Government of Dependencies* (London 1841), reprinted with an introduction by C. P. Lucas (Oxford 1891, rev. ed. London 1901); *An Essay on the Influence of Authority in Matters of Opinion* (London 1849, 2nd ed. 1875); *A Treatise on the Method of Observation and Reasoning in Politics*, 2 vols. (London 1852); *Letters . . . to Various Friends*, ed. by Gilbert F. Lewis (London 1870).

Consult: Bagehot, Walter, Essay on Lewis in *Works*, ed. by Mrs. Russell Barrington, 10 vols. (London 1915) vol. iv, p. 187-224.

LEXIS, WILHELM (1837-1914), German economist and statistician. Lexis, the son of a physician, originally devoted himself to mathematics and the natural sciences; in the 1860's he became a publicist and a self-taught economist. In 1872 he was appointed to the chair of economics at the University of Strasbourg and from 1874 to 1876 was professor of geography, ethnology and statistics at Dorpat. After teaching economics at the universities of Freiburg i. Br. and Breslau he went to Göttingen, where he taught economics from 1887 until his death. Because of his great organizing ability and amazing erudition Lexis was an invaluable coeditor of the first three editions of the *Handwörterbuch der Staatswissenschaften* and after 1891 of the *Jahrbücher für Nationalökonomie und Statistik*. He was also an irreplaceable aid to his friend Althoff, the power in the Prussian Ministry of Education, with which he became officially connected as an independent expert in 1893. Among the semi-official reports which appeared under Lexis' direction and in large part from his pen was the monumental work *Das Unterrichtswesen im Deutschen Reich* (4 vols., Leipsic 1904).

Lexis was a scholar of encyclopaedic range and an acute and alert thinker. He began with a comprehensive account of the French export bounty system (Bonn 1870) and published in the same decade a study of employer and employee organizations in France (Verein für Sozialpolitik, *Schriften*, vol. xvii, 1879). The latter reflects Lexis' stand as a socialist of the chair, which later caused him to reject the doctrine that scholars as such should abstain from value judgments. His most general work in the field of economics is the *Allgemeine Volkswirtschaftslehre* (Die Kultur der Gegenwart, sect. ii, vol. x, pt. i, Berlin 1910; 3rd ed. with critical introduction by Karl Diehl, Leipsic 1926); clear, concise and of lasting value, it is an independent treatise which adopts business concepts wherever possible and tests deductive conclusions in the light of eco-

nomic realities. He assimilated the terminology of labor value to such an extent that he was occasionally mistaken for a socialist.

Lexis' mathematically trained mind found its greatest satisfaction where it could operate with exact concepts and with data capable of numerical treatment; hence his preference for subjects like money, statistics and insurance. Regarded as a high authority by both sides in the bimetallic controversy, he deviated temporarily and only in a few particulars from the position of consistent gold monometallism. He rejected paper money because of its liability to abuse but became convinced after a study of Austrian and Russian monetary history that a stable paper currency is possible under certain circumstances. His most original contributions were in the field of mathematical statistics. Special mention must be made of his theory of statistical dispersion, recognized as a great scientific achievement, and of a new method of graphic treatment of mortality, first broached in his *Einleitung in die Theorie der Bevölkerungsstatistik* (Strasbourg 1875) and developed in later publications. He made use of the results of these studies in his seminar in insurance—the first of its kind, later introduced in many universities—which he conducted with great success at the University of Göttingen from 1895 to 1914. His Göttingen lecture course on the economics and statistics of insurance became a model for instruction in insurance economics in other German universities.

KARL OLDENBERG

Consult: Bortkiewicz, L., in *Zeitschrift für die gesamte Versicherungswissenschaft*, vol. xv (1915) 117-23; Lorey, W., "Wilhelm Lexis und seine Bedeutung für die Versicherungswissenschaft" in *Nordisk statistisk tidskrift*, vol. iv (1925) 31-41; Klein, F., in *Deutsche Mathematiker-Vereinigung, Jahresbericht*, vol. xxiii (1914) 314-17.

LI HUNG CHANG (1823-1901), Chinese statesman and diplomat. After receiving the usual classical education Li Hung Chang entered the civil service. He became attached to the army during the Taiping rebellion and because of his military successes was appointed commander in chief and governor of Kiangsu. He inherited Ward's, later Gordon's, "ever victorious army," whose efficiency insured the defeat of the rebels. In 1867 while suppressing the Nienfei he became viceroy of the Hukwang provinces and from 1870 to 1894 served as viceroy of Chihli and superintendent of northern trade. During this period a great deal of his time was devoted to diplomatic and foreign commercial affairs.

Li Hung Chang stands out among contemporary Manchu officials for his appreciation of the strength of the new forces of the West and for his attempts to cope with them by reforming Chinese administration and by introducing the material features of western civilization. He urged more centralized government, created a modern army and navy, established technical schools and adopted the plan of sending young Chinese abroad for study. He was responsible for the construction of railways and of a telegraph system, the organization of the China Merchants' Steamship Company, the introduction of modern mining machinery, the foundation of a medical college and other progressive measures. Unfortunately the full development of many of these projects was arrested by official conservatism or corruption.

But it was in foreign affairs that Li's influence was paramount. Aware of China's weakness, he insisted on a policy of conciliation, which he supplemented by diplomatically setting the powers against each other and by creating through the foreign press an exaggerated idea of China's military power. His masterly diplomatic abilities were, however, heavily handicapped by China's continued weakness. Among his achievements were the settlement of the Margary murder case with England, of the Franco-Chinese war and of the inhuman coolie traffic with Peru. When the long drawn out duel with Japan over the Liukiu Islands and Korea ended in a war which revealed the superficiality of China's military reorganization, Li lost his prestige. He was restored to power to negotiate the Shimonoseki treaty and by gaining the intervention of Russia, Germany and France succeeded in avoiding the stipulated cession of southern Manchuria to Japan, but at the eventual cost of the Russian lease and railway concessions in Manchuria with their attendant complications. His fear of Japan constantly forced him into a pro-Russian policy. His last service was to save the Manchu dynasty by negotiating with the victorious European powers after the Boxer outbreak, again winning concessions with the aid of Russia, in return for which the latter demanded a virtual protectorate over Manchuria.

WILLIAM JAMES HAIL

Consult: Bland, J. O. P., *Li Hung Chang* (London 1917); Douglas, R. K., *Li Hung Chang* (London 1895).

LIABILITY. Although the term is used also in other senses, its most accepted meaning is a situation in which one may exact legally and

another is legally subjected to the exaction. One of the persistent problems of jurisprudence is how to explain and systematize these situations in which one may exact from another that, as the Roman law formula puts it, he "give or do or furnish" something for one's advantage. A general theory of liability in this sense is constantly referred to as the basis of legal reasoning and by way of critique. The Roman texts conceived in terms of natural law speak of a bond of right and law whereby the one may justly and lawfully exact and the other is bound in justice and law to perform. The analytical jurist speaks of rights in personam—legally recognized and enforceable claims against definite particular individuals. But obligation, the Roman and civilian term for the relation of the parties to such a right, is an exotic in that sense in the common law world. The Anglo-American lawyer, thinking procedurally, speaks of contracts and torts, using contracts in a very wide sense to include situations giving rise to duties of restitution enforceable procedurally *ex contractu*. Thus liability may be looked at from the standpoint of the acts or events giving rise to the capacity of exaction and duty of performance (as in the common law mode of speech—contract, quasi-contract, tort), from the standpoint of the relation (as when Romanist and civilian speak of "obligation"), from the standpoint of the capacity to exact (right in personam, active obligation) or from the standpoint of subjection to the exaction (passive obligation). As the relation is not the significant thing for systematic purposes and the phrase right in personam and its correlative right in rem are apt to be misleading, there is a general tendency to use some word denoting the whole situation (liability, *Haftung*) or, as Demogue does, to define obligation in terms of the situation rather than of the relation.

One historical starting point of liability is recovery of money by way of penalty for a private wrong. One who did an injury or stood between an injured person and his vengeance by protecting a kinsman, a dependent person or a domestic animal that had done an injury must compound for the injury or bear the vengeance of the injured. With the putting down of the feud as a recognized remedy payment of composition becomes a duty rather than a privilege or, in case of injury by persons or things in one's power, a duty alternative to one of surrendering the offending dependent or thing. Later composition comes to be measured in terms of the injury rather than of the vengeance to be bought off and

composition for vengeance becomes reparation for the injury. As a result of this history the Roman law world thinks of the wrongdoer as debtor to the injured person for the reparation.

Another historical starting point of liability is recovery of a thing certain or, what was originally the same, a sum certain, promised in such a way that the failure to carry out the promise would endanger the general security. One might in making a promise have called the gods to witness, and the polity might give a legal remedy to the promisee lest he invoke the aid of the gods and jeopardize the general security. Or one might have called his neighbors to witness and a legal remedy might be given lest the affronted neighbors, invoked by the promisee, threaten the peace. Such things happened when, for example, composition was promised for some injury not specified in the legal tariff of compositions or where one who held another's property for some temporary purpose failed to return it. Before the days of coined money it was hard to distinguish between lending a horse for the borrower to ride to town and lending a cow to enable the borrower to pay a composition. The Roman *condictio*, which as the type of actions in personam is the historical starting point of rights in personam as well as of theories of obligation, was at first a recovery of a thing certain due upon promises of this sort.

When lawyers began to generalize and to frame conscious theories, the crude beginnings of liability in a duty to compound for insult or affront to man or gods or politically organized society, lest they be moved to vengeance, became liability to answer for injuries caused by oneself or done by persons or things in one's power and liability for certain promises made in solemn form. Thus arises a twofold basis for liability—the duty to repair injury and the duty to carry out formal undertakings—which has persisted in subsequent theory. But the resulting categories of delict and contract do not represent any inherent requirement of legal thinking. They are historical products.

In the seventeenth and eighteenth centuries philosophical jurists, applying rationalist method to the Roman formulae calling for the judgment demanded by "good faith" in particular relations or transactions, sought to develop logically the "nature" or ideal form of situations where liability was asserted or recognized. And it proved easy to fit the two historical categories—formal undertaking and delict—into this mode of thought. The duty to perform an inten-

tional undertaking seemed to rest on the inherent moral quality of a promise which made it intrinsically binding on an upright man. The typical delict was intentional aggression upon the person or the substance of another; hence the significant basis of delictal liability seemed to be the moral duty to repair an injury caused by wilful aggression. Liability under both categories rested on the demands of good faith in view of intentional action.

Nineteenth century jurists substituted for this ethical conception a metaphysical one. They conceived of law as realizing an idea of liberty. The highest good was a maximum of abstract free individual self-assertion. The end of law was to bring about the widest possible abstract individual liberty. A regime of voluntary assumption of duties was the rational outcome of the universe; it was the ideal toward which evolution continually tended. Hence the growth of law must be in the direction of giving the widest possible effect to the declared will and imposing no duties except to effectuate individual wills or reconcile individual wills in action. Accordingly liability could flow only from assumed duties or from culpable conduct.

It was not possible to adjust the actual precepts of legal systems to this will theory of liability. An appearance of adjustment was brought about where settled rules of law held men answerable in the absence of actual culpability by assuming a culpability as established by the fact of liability. Also where one was held to duties without any undertaking, it was said that an undertaking was implied. But the historical jurists did not hesitate to say that cases of legal liability without fault were only historical survivals which should be eliminated, and they came very near to establishing throughout the world an ideal of no liability to repair injuries except in case of fault. Indeed the law in continental Europe for a time came very near to a consistent scheme of delictal liability for fault and for fault only, and the conception of a legal transaction came very near to establishing a regime of liability for all intentional declarations of will to be bound. But it was never possible to fit quasi-contractual liability into this theory, and many cases of delictal or quasi-delictal liability without fault obstinately persisted in spite of the theory.

In the present century the tendency is to give over the will theory of liability and to hold that the law gives effect (or should give effect) to the reasonable expectations arising out of conduct, relations and situations. In the civilization of

today men must be able to assume that those with whom they deal in the general intercourse of society will act in good faith, that others will commit no intentional aggressions upon them, that when others act affirmatively they will do so with due care and that where one maintains potentially dangerous things or employs potentially dangerous agencies he will keep them in check. The reasonable expectations involved in these postulates of civilized society and their corollaries are the basis of recent theories of liability.

ROSCOE POUND

See: JURISPRUDENCE; TORTS; NEGLIGENCE; CONTRACT; DAMAGES; AGENCY; CRIMINAL LAW; STATE LIABILITY.

Consult: Pound, R., *Introduction to the Philosophy of Law* (New Haven 1922), lectures iv, vi; Demogue, R., *Traité des obligations en général*, 4 vols. (Paris 1923-24) vol. i; Saleilles, R., *Études sur la théorie générale de l'obligation* (3rd ed. Paris 1914); Savigny, F. K. von, *Das Obligationenrecht*, 2 vols. (Berlin 1851-53) vol. i, sects. 2-4; Bierling, E. R., *Zur Kritik der juristischen Grundbegriffe*, 2 vols. (Gotha 1877-83) vol. ii; Holmes, O. W., *Collected Legal Papers* (new ed. New York 1921) p. 49-116; Baty, T., *Vicarious Liability* (Oxford 1916); Hasse, J. C., *Die Culpa des römischen Rechts* (2nd ed. Bonn 1838); Jhering, R. von, *Das Schuldmoment im römischen Privatrecht* (Giessen 1867); Rümelin, M., *Schadensersatz ohne Verschulden* (Tübingen 1910); Triandafil, E., *L'idée de faute et l'idée de risque comme fondement de la responsabilité* (Paris 1914); Winfield, P. H., *The Province of the Law of Tort* (Cambridge, Eng. 1931) ch. x; Binding, K., *Die Normen und ihre Übertretung*, 4 vols. (new ed. Leipzig 1914-22) vol. i, sects. 50-51; Meumann, G. A., *Prolegomena zu einem System des Vermögensrechts*, Studien zur Erläuterung des bürgerlichen Rechts, pt. 12 (Breslau 1903); Duguit, Léon, *Les transformations générales de droit privé depuis le code Napoléon* (2nd ed. Paris 1920), tr. by L. B. Register, in *Progress of Continental Law in the Nineteenth Century*, Continental Legal History series, vol. xi (Boston 1918) ch. iii, pt. v; Geny, F., "Risque et responsabilité" in *Revue trimestrielle de droit civil*, vol. i (1902) 812-49; Rolin, H., "De la responsabilité sans faute" in *Revue de droit international et de législation comparée*, 2nd ser., vol. viii (1906) 64-91; Demogue, R., "Fault, Risk, and Apportionment of Loss in Responsibility" in *Illinois Law Review*, vol. xv (1921) 369-82; Thayer, E. R., "Liability without Fault" in *Harvard Law Review*, vol. xxxix (1915-16) 801-15; Smith, J., "Tort and Absolute Liability" in *Harvard Law Review*, vol. xxx (1916-17) 241-62, 319-34, 409-29; Bohlen, F. H., "The Rule in Rylands v. Fletcher" in *University of Pennsylvania Law Review*, vol. lix (1911) 298-326, 373-93, 423-53; Isaacs, N., "Fault and Liability" in *Harvard Law Review*, vol. xxxi (1917-18) 954-79.

LIABILITY INSURANCE. See COMPENSATION AND LIABILITY INSURANCE; CASUALTY INSURANCE.

LIANG CH'I-CH'AO (1873-1929), Chinese scholar, publicist and statesman. At the age of eighteen Liang joined the reform movement under his teacher K'ang Yu-wei and in 1895 served as secretary of the first political meeting in Peking. In the following year he became editor of *Shih wu-pao* (Current affairs). His brilliant advocacy of the modernization of China soon won him widespread recognition. After the failure of the coup d'état of 1898, which had been directed at deposing the dowager empress, he fled to Japan where he remained—except for short visits to Honolulu, the United States and Australia and a secret trip to Shanghai to take part in the unsuccessful rising at Hankow—until the republican revolution of 1911. In Japan he edited successively *Ch'ing yi pao* (Public opinion), *Hsin min ts'ung pao* (New people), *Chen luen* (Political review) and *Kuo feng pao* (National movement); of these the *Hsin min ts'ung pao* was the most important. Abandoning K'ang Yu-wei's idea of a Confucianist revival he popularized western political philosophy and history, openly attacked the Manchus and criticized Chinese political thought and social institutions. He invented a new style of vigorous and lucid writing and introduced a new freedom into Chinese prose by adopting foreign terms and colloquial expressions. Liang became a predominant influence in Chinese intellectual life; the *Hsin min ts'ung pao* achieved the relatively enormous circulation of 20,000.

Although before 1911 Liang had advocated a constitutional monarchy as a bulwark against recurrent revolutions, once the republic was established he supported it loyally. Opposed to the 1913 revolution, he served as minister of justice in Yuan Shih-kai's government, resigning when he discovered that Yuan was plotting against the republic. In 1916 he led the armed opposition against Yuan's monarchist coup d'état and in 1917 joined Tuan Ch'i-jui in suppressing the restoration, becoming minister of finance. Throughout these years Liang was the recognized leader of the *Chin pu tang* (Progressive party). He was chiefly responsible for China's joining the Allies in the World War.

With the continuation of civil war after 1917 Liang retired from politics. He attended the Paris Peace Conference of 1919 and upon his return to China devoted himself to literary and historical studies, trying to make a critical reevaluation of Chinese culture. Some of these were written in the spoken language, as he was an enthusiastic supporter of the literary renaissance

which aimed at the replacement of the dead classical language by the living tongue. He lectured in the various universities and from 1924 to 1928 was research professor at the University of Ts'ing-hua.

V. K. TING

Important works: *Intellectual History of the Manchu Dynasty* (Shanghai 1921); *The Philosophy of Motze* (Shanghai 1921); *The Method of Studying History* (Shanghai 1922); *History of Chinese Political Thought before the Ts'in Period* (Shanghai 1923); *History of Chinese Political Thought during the Early Tsin Period*, tr. by L. T. Chen (London 1930); *Essays on the History of Chinese Buddhism* (Shanghai 1923); *The Collected Works of Liang Ch'i-chao* (Shanghai 1925).

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LIBEL AND SLANDER are the two branches of the Anglo-American law of defamation. If the defamatory matter is given a permanent form by some such method as writing, printing or painting it is libel; if the form is merely temporary, such as spoken words or gestures, then it is slander. The division is thus based upon the method of publication. Many legal systems regard written defamation as more serious than that which is merely spoken, but Anglo-American law is peculiar in clinging to separate bodies of law for what it regards as distinct wrongs.

The illogical common law distinction between libel and slander can only be understood historically. The concept of slander was the first to take shape. Anglo-Saxon law like other Germanic laws had little to say about ordinary defamation although it took a serious view of insult by word or gesture, which it visited with savage penalties, such as the excision of the tongue. After the Conquest the punishment took the newer form of an ignominious withdrawal of the offensive words, and the customs of local courts show that insulting words continued to be punished by them throughout the Middle Ages. The royal courts declined to deal with such trivial matters; hence the rules that a slander is not actionable unless it is published to a third person.

Although in 1295 Parliament emphatically declared that there was no remedy for slander at common law, it had already been forced to take some notice of the spreading of scandalous rumors about great men as a result of which po-

litical disturbances might occur. It was enacted in 1275 that one who repeated such tales was to be imprisoned until he found the originator of them. This provision was reenacted in 1378, and in 1388 the council was given discretionary powers over *scandalum magnatum* in order to protect prelates, peers, judges and certain great officers of state. The peasants who revolted in 1381 complained of the law of *scandalum magnatum*, which seems to have been used oppressively. Later legislation in 1554 and 1558 appropriately described the offense as "seditious," but by a curious change it soon after was construed as giving only a civil remedy for slander, by way of an action on the case for damages, to the persons mentioned in the statutes.

The church also punished those who defamed their neighbors. It would seem that this jurisdiction developed by extending the punishment of those who laid false criminal charges to include those who merely imputed crimes. As a great variety of moral lapses were crimes in ecclesiastical law, it followed that a large number of slanders could be prosecuted on these grounds, and the church retained this jurisdiction in theory until 1855. As an unfortunate consequence of this the common law refused a remedy in those cases where the church had jurisdiction by reason of an imputation concerning matters of spiritual cognizance. The ground for this refusal was supposed to be the impossibility of trying in a secular court the truth of such an imputation if it were pleaded as a defense. Moreover by means of prohibitions the common law courts strictly confined the church to the criminal side of its jurisdiction and forbade any award of money compensation to the injured party.

The common law, however, finally developed an equivalent doctrine for matters within its own jurisdiction, and thus in the sixteenth century an action for damages was allowed when there was an imputation of a crime punishable in a common law court with imprisonment. Such a slander was said to be actionable per se, since it was unnecessary for the plaintiff to prove special damage. Early in the seventeenth century two other classes of slander were settled as actionable per se; namely, the imputation of leprosy or venereal disease and reflections upon a man in respect of his office, profession or trade. There was great reluctance to make any further addition to these categories, and it was not until the Slander of Women Act of 1891 that the imputation of unchastity in a woman was made

actionable per se without proof of special damage, although in the city of London and a few other localities it had been so since the Middle Ages.

Late in the sixteenth century the common law courts had also given a remedy for slanderous words of every sort, even those imputing merely ecclesiastical offenses, if temporal damage resulted. It would seem that such a remedy had existed as early as the fourteenth century in the county court, although not in the central courts. Early in the seventeenth century therefore the common law had already established the main principles of slander as they exist today, tradition associating Sir Edward Coke with the work of laying their foundations.

Although the special law of libel still remained to be developed, there resulted an immense flood of litigation, which seriously embarrassed the courts. In order to stem the tide they hit upon the singular expedient of diminishing the quality of their justice in order to reduce the demand for it. To this end they insisted upon very elaborate pleading, inventing a great many rules governing the use of the colloquium, which sought to set out the circumstances in which the words were spoken and to show that they were in fact directed against the plaintiff, and the innuendo, which explained the defamatory meaning of the words where it was not immediately apparent. Words were construed as innocent if by any perversion of grammar or logic they could be twisted from a defamatory meaning.

In the meantime another line of development was taking place in the prerogative courts. Since the statutes on *scandalum magnatum* were now rarely invoked and had come to be regarded as civil rather than criminal in their scope, the lack of criminal law on defamation was being felt. The Privy Council and Star Chamber had from the first exercised strict control over the press, and soon all kinds of "libels" (written or spoken) attacking public officers were rigorously dealt with. New rules appeared. Publication to a third person was not necessary to constitute the crime; repetition was as serious as originating a libel; merely to possess without publishing a libel was "perilous." Libels on private persons were treated on similar lines, for they too tended to provoke violence and disorder, particularly dueling. The truth of the statements (always a defense at common law) was not a defense in the Star Chamber if the defamation were in writing, and libels upon the dead were equally punishable as provoking disorder. Although the Star

Chamber did not confine the word libel to writings only, any more than the common law restricted slander to words, yet it seems to have regarded spoken and written defamation as needing different treatment. Writing, it was held, greatly aggravated the offense, which consisted in the manner of defamation, and so truth could not constitute a defense; when defamatory words were only spoken, however, it was the matter that counted, and so its truth was a good defense.

These developments were crystallized in the well known case *De libellis famosis* (5 Rep. 125) decided in 1606, which demonstrates that the judges of the Star Chamber had been influenced by the Roman law but that they had misapplied it. In the early Roman law the abusive chant or song had been punished capitally, while less grave forms of insult were classified with physical affronts as *injuriae*. The praetor later gave an *actio injuriarum aestimatoria*, whereby the defamed might be awarded damages proportioned to the gravity of the offense and its publicity, and in the time of Sulla the *lex cornelia de injuriis* imposed heavy criminal penalties, which later imperial legislation retained more especially for anonymous attacks by means of epigrams or pasquinades, the so-called *libelli famosi*. It was thus not the mere form but the character of the matter published that constituted the offense.

The abolition of the Star Chamber in 1641 compelled the common law courts to decide how much of its jurisdiction was worth retaining and how far its doctrines were capable of blending with the common law. This was the especial task of the Restoration judges, and they began (in a judgment by Sir Matthew Hale in 1670, *Lake v. King*, 1 Lev. 240) by accepting the distinction which the Star Chamber had already foreshadowed between written and spoken defamation. Since then libel has had its own rules, rules more modern in spirit than those of slander. Since the Star Chamber, although primarily a criminal court, not only punished the libeler but occasionally awarded damages to the injured party, libel may still be treated according to circumstances as either a tort or a crime, thus differing from slander of a private person, which was never criminal. On the other hand, the criminal definition of libel was so wide that there have survived forms of libel which are criminal although not actionable; examples are libels upon the dead and upon a sect or class of people, where no particular individual is indicated. Again, since the Star Chamber had no forms of action, the rules of special damage which are character-

istic of those slanders that are not actionable *per se* were likewise avoided. Finally, since the Star Chamber did not use a jury, the King's Bench, when it assumed jurisdiction over libel, confined the function of the jury to finding such facts as authorship and publication, reserving for the bench the question whether those facts constituted a libel. A long succession of political libels in the eighteenth century showed so clearly that the King's Bench was the successor to the spirit as well as to the letter of the Star Chamber's law of libel that finally in 1792 Fox' Libel Act was enacted, allowing the jury to find a general verdict in cases of criminal libel.

The earliest of the defenses to defamation to become established was "justification": proof that the statement was true. This very soon became the rule in slander and was extended soon after the Restoration to the tort of libel, although as a result of the Star Chamber tradition it was not available against a criminal charge of libel until Lord Campbell's Libel Act of 1843 allowed truth to be proved even in criminal cases, if it could be shown that publication was for the public benefit. Furthermore since the Star Chamber had customarily described written libels as "malicious," confusion resulted for two centuries from the gradual changes in the meaning ascribed to malice in connection with defamation. By the end of the nineteenth century, however, malice remained important principally when a defense of "privilege" was interposed. If malice is proved in such cases, the defense of privilege fails.

Ordinarily privilege is a defense to both civil and criminal proceedings. An example of absolute privilege is that attaching to parliamentary papers under the act of 1840 (3 & 4 Vict., c. 9) which was passed in consequence of the denial of absolute privilege by the courts in the famous case of *Stockdale v. Hansard*. "Qualified privilege" will cover a large variety of cases where defamatory statements, true or false, have been made in the course of business, family or personal communications. References by employers and bankers are common examples. The defense of privilege in such cases is available only if the statements were made by and to persons having an interest in the subject matter of the communication, and the privilege can be destroyed by proving malice.

The rise of large newspapers brought special problems, for their power of inflicting injury was enormous, although the conditions under which they were produced made it difficult for them to

take precautions. Lord Campbell's Libel Act allowed the publisher of a libel to show in mitigation of damages that he had published an adequate apology; and in criminal cases newspaper owners were allowed to show that a libel was published without their authority or consent and that it was not due to their want of care. Journals still, however, incurred heavy risks. For example, a fair and accurate report of proceedings in town councils and other public meetings might contain defamatory matter. The Newspaper Libel and Registration Act of 1881 gave injured persons the means of discovering the true owner of a newspaper from the register and gave the paper some protection in reporting public meetings; this was enlarged by the Law of Libel Amendment Act of 1888 into a qualified privilege which would fail only if the paper had acted with malice or refused to print a reasonable letter of contradiction or if the matter was not of public concern. The privilege long attaching to reports of judicial proceedings does not cover "obscene" matter unless in professional or scientific periodicals or books.

Literary, dramatic and artistic criticism has long been a prominent feature of journalism, whose province in fact extends to all matters of public interest. During the last century the press has greatly gained in liberty by a line of decisions which recognize "fair comment" as a defense. Such matter must be really comment and not imputations of fact; such comment, although it may be strongly expressed, must be "fair," which does not necessarily mean that the comment must be unprejudiced or well informed; and it must be on a matter of public interest. This last point is one for the judge to decide. Certain sections of the press invade also the privacy of persons in the public eye in ways which are most reprehensible, although perhaps not illegal. The growing need for the protection of the right to privacy is at present very imperfectly met by the law of libel.

Libel and slander have so far been considered in connection with injuries to reputation and attacks upon government, morals and religion; but the term slander also covers false statements causing damage which are directed not against a person's reputation but against his property. It is a curious result of the early date of this development that the word slander in this connection covers written as well as spoken words. The earliest form was slander of title to land, whereby the owner lost a sale which was pending. Cases of this sort occurred late in the sixteenth cen-

tury; and a century later the principle was extended to other situations, notably advertisements, which at that time were largely in the nature of vigorous disparagements of the wares of rival traders.

The American law of defamation in the main closely resembles the English law. Most jurisdictions took the common law as a basis and enacted modifying statutes similar to the English. The statutes which have attempted definitions of libel and slander have not fundamentally altered the common law concepts of the wrongs. The principal divergence from English law is the extent to which different states admit truth as a defense. New York enacted a statute for this purpose as early as 1805. In many states the class of slanders actionable per se has been widened to include not only imputations of female unchastity but also such other imputations as those of adultery, impotence, incest and perjury.

In France during the Middle Ages the local customals punished defamation in a great variety of ways, although at first insult was not distinguished from defamation. Under an ordinance of 1651 the printing of a defamatory libel was punished by whipping and on a second offense with death. In 1757 seditious and irreligious libels were made capital. Printing in general was strictly controlled by the crown by a system of licensing which, abolished during the revolution, was restored during the Napoleonic regime and lasted with interruptions until 1828. The French press, which had taken a large part in the revolution, soon discovered its enormous powers. In 1819 therefore a law was passed to protect individuals against press libels by enacting that truth could not be pleaded in defense. In 1850 it was enacted that all articles of opinion must be signed; and although this law has since been repealed, political articles are still usually signed in the French press. The modern law rests on the act of July 29, 1881, which is virtually a code of defamation and press law and has had enormous influence in European countries. The law imposes the obligation of printing conspicuously a rectification by an official whose acts have been misrepresented or a reply by a private person who considers himself defamed. Defamation is distinguished from insult, and malice is presumed unless the defendant can establish his good faith. Defamation of the dead is punished only when it is used as a means of attacking the living. Truth is a defense when the matter concerns officials and persons in a public position, but no attack on a person's private life can be

justified by the claim that it is true. Statements made at the trial must not be reported in the papers, so great is the concern for privacy. Indeed the principle has been frequently stated in France that there are walls around a person's private life.

The Germanic laws of the early Middle Ages contained schedules of fines for defamation. The law of the later Middle Ages developed means of apology and public retraction, which did not entirely disappear with the reception of the Roman law. The law of the Pandects developed especially the Roman doctrine of the *pasquinade*. The German regional laws from the sixteenth to the eighteenth century for the most part treated defamation as a private delict. The modern German law is similar to the French. Yet although there is a press law, the offenses of insult and defamation are not defined therein but in the general penal code. A more important difference is that truth is regularly admitted as a defense unless the person defamed is deceased.

The Italian penal code which came into force in 1931 contains the most recent continental legislation on defamation. Under the general heading of "crimes against honor" insults addressed to a person incur fine or imprisonment, and the penalty is increased if specific facts were imputed or if other persons were present. Statements injurious to reputation are similarly punished and the penalty is increased if the defamation is printed, if specific facts are imputed or if the injured party is a judicial, governmental or corporate person. Truth is no defense unless both parties agree to submit it to a "court of honor." Relatives may prosecute for the defamation of a deceased person. Defamatory documents may be suppressed, and damages may be awarded when the court sees fit. Provocation by the injured party himself will excuse defamation committed in a moment of anger. Offenses by the press against the state, religion and morals are set out at length.

Thus while the continental law of defamation represents a unified category of wrongs, it contains distinctions of gravity. The provision that permanence of form aggravates a defamation is very common in continental codes. The publicity of a defamation is also very generally taken into consideration. The regard for honorific motives derives from Germanic conceptions, not from the later Roman law, to which such motives were alien. The persistence of the system of licensed printing in continental countries well into the nineteenth century had a particularly

great influence upon the development of their law of defamation. The special continental treatment of the defamation of public officials with respect to their official acts is partly matched by the Anglo-American law of contempt of court, which provides a special protection for judges. Finally, the disparagement of a rival trader's wares, which is still part of the Anglo-American law of libel and slander, is placed more logically by those continental countries which follow the German system within a statutory system of unfair competition.

THEODORE F. T. PLUCKNETT

See: FREEDOM OF SPEECH AND OF THE PRESS; CENSORSHIP; TORTS; UNFAIR COMPETITION; TREASON; LESE MAJESTY; CONTEMPT OF COURT.

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LIBERAL PARTIES. See **PARTIES, POLITICAL**, sections for separate countries.

LIBERALISM. In its larger sense liberalism is a deep lying mental attitude which attempts in the light of its presuppositions to analyze and integrate the varied intellectual, moral, religious, social, economic and political relationships of human society. Its primary postulate, the spiritual freedom of mankind, not only repudiates naturalistic or deterministic interpretations of human action but posits a free individual conscious of his capacity for unfettered development and self-expression. It follows therefore as an obvious corollary in the grammar of liberalism that any attempt on the part of constituted authorities to exert artificial pressure or regulation on the individual, in his inner and outer adjustments, is an unjustifiable interference, a stultification of his personality and initiative. Against such coercive interference, whether in the moral, the religious, the intellectual, the social, the economic or the political sphere, liberalism has consistently arrayed its forces.

Although liberalism in this larger sense is a complex pattern of interrelated strands which cannot be disentangled, the term soon came to acquire a more precise connotation as the political implications of liberalism were abstracted and given primary emphasis on the ground that political liberty constituted a prerequisite, and necessary guaranty, of liberty in its broader reaches. At an early stage of its development therefore the forces of liberalism concentrated on the crucial problem of limiting the interference of the state and of transforming state policy into a vehicle for promoting the liberties of individuals and groups.

In the process of formulating its libertarian ideals and objectives political liberalism gradually evolved an explicit system and ideology and, as it drew near to the parliamentary arena, a more specific program. With a view to translating this program into effective action liberalism was

called upon to set up formal agencies which should be, on the one hand, sufficiently cohesive to prosecute a decisive policy and, on the other, sufficiently deliberative to conform to the liberal ideal of a harmonious interplay of opinion, free from coercive pressure on the individual. This compromise was worked out in its most effective form in the liberal parties which during the first half of the nineteenth century came to assume throughout Europe and America the role of parliamentary watchdogs over the activities of the government, attacking any interference with the rights of the individual citizen and gradually extending and embodying in legislation the liberal program. From a principle of social criticism liberalism had become actual governmental practise, and in the process its original ideology had inevitably undergone a certain transformation. In their new role the liberal parties made it their task to eliminate conflicts between authority and liberty. To this end they endeavored to limit as far as possible the sphere of their own influence with a view to avoiding interference with the free play of individual and social forces, to initiate constitutions and laws for the sake of safeguarding the rights of liberty and, finally, to utilize their authority for increasing the number and influence of untrammelled individuals and associations. It is through the work of these parties that the liberal states of the nineteenth century assumed shape and solidity. With their institutions of public law, their constitutions, their systems of checks and balances, these states represented both a permanent curb on governmental activity and an embodiment of the continuity of liberal traditions in the various countries. Thus it came about that although there were frequently periods in which neither the parties nor the governments were formally liberal, nevertheless liberalism itself survived in the institutions of state as well as in political customs which sustained and in turn were sustained by the state.

Viewed in this broader light political liberalism may be said to embrace party ideologies and programs, the work of governments in the interests of social justice as well as the social, juridical and political institutions which form the basis of liberal states. It thus becomes possible to analyze more realistically the contrast which is usually pointed between liberalism and conservatism. The two terms are not essentially antithetic, as is evidenced by the fact that a liberal party upon attaining power inevitably dedicates itself to the conservation of the liberties already

won. The liberal and the conservative do reveal, however, a basic difference in mental outlook. Liberty like every spiritual activity can be preserved only by means of new acquisitions, but the conservative temperament runs the risk of making it overrigid, of converting it into a sacrosanct possession and hence into a privilege; so that whatever the origin of the conservative, he eventually becomes an advocate of the status quo, endeavoring to reenforce it and in this way to increase the privileges of the already privileged classes. The liberal, on the other hand, if he is faithful to his principles, keeps in mind the future as well as the past and sponsors innovations and reforms. Carried to its ultimate conclusions liberalism gives rise to radicalism with its tendency to make a *tabula rasa* of the past and its attempts to introduce into human society a new order based on reason. In contradistinction to the extremist tenets of conservatism and radicalism liberalism represents a flexible equilibrium, which while recognizing freedom as an expansive force tending toward the future values the historical continuity of the actions through which the human spirit gradually realizes itself. Only through these actions, it is felt, can both the individual and society acquire that self-mastery capable of finding a lasting embodiment in new achievements. Liberty as understood by the liberal is attained not by the man who forever starts his life anew but by him who brings to bear upon every action of his life his whole personality.

In European political liberalism the conservative strains of historical tradition have been fused with the progressive strains of abstract rationalism. British liberalism up to the eighteenth century was concerned primarily with conservation, while French liberalism, as culminating in the revolution, proceeded rationalistically, indifferent on the whole to its political heritage. But under the influence of a group of radical ideologists saturated in continental rationalism British liberalism in the nineteenth century came to emphasize progress at the expense of conservation; while French liberalism, on the other hand, absorbed many historicist and traditional elements as a result of a closer study of the British model. In this way the distance between the two forms, which was originally considerable, gradually diminished.

It is characteristic of the traditionalism of the English liberal spirit of the seventeenth and eighteenth centuries that it was nourished not by a rational definition of the concept of liberty but

rather by a slow and persistent acquisition of liberties—a gradual process of accretion, organic in character. The English, feeling no need to formulate their liberties in a system or to sanction them by a constitution, entrusted their defense to the forces of custom and habit rather than to a rational and abstract doctrine of popular sovereignty. Thus the vindication of liberties devolved upon succeeding social and economic groups which struggled for political dominance rather than upon a single homogeneous class which revolted against privilege under the banner of natural, universal laws.

The unusual vitality of the British nobility, which since early feudal days had constituted itself the perennial champion of liberties and law, may be accounted for by the conscientiousness with which it performed the functions entrusted to it. Actively engaged in the promotion of agriculture and trade, in the administration of justice, in local and parliamentary government, it remained throughout the eighteenth century a dynamic force—a striking contrast to the parasitic nobility of France with its monopoly of privileges divorced from function. When the industrial revolution of the eighteenth and nineteenth centuries conferred a preponderance of power on the bourgeoisie it was turned against the aristocracy not in order to undermine the existing structure, as was attempted in France, but in order to realize for itself a greater degree of participation so as to exploit in its own interests the advantages of traditional liberties. The struggle between the two classes meant therefore not a sudden discontinuity in historic life but a development of one and the same system. Similarly at a later stage the proletarian movement, although inspired by different ideals, pursued and to a limited degree realized its aspirations in the spirit of traditional liberalism, despite the fact that this moderation involved a serious loss of impetus and entailed a moderate program as compared with other countries.

This sense of continuity has on the whole dictated the policy also of the British crown, which beyond a few sporadic outbursts of absolutism—as, for example, on the part of the Tudors and Stuarts—was never in a position to ignore the claims of its more progressive subjects. This royal moderation is attributable primarily to the fact that the vital needs of protection and external defense, which on the European continent strengthened the state at the expense of the liberties of its citizens, were less compelling in the case of an insular people protected by the sea.

The chief instrument of oppression, a readily available armed force, did not exist. The navy, the main defense of England, generated, on the contrary, a spirit of intense individualism and by its very sphere of action was able to escape centralized supervision, while the fact that the army was engaged almost constantly in continental wars tended to eliminate the possibility of armed interference with liberties at home. The two English revolutions were therefore attempts not at undermining the institution of the crown itself, as was the case in France, but rather at curbing the excessive ambitions of the king, who constituted the momentarily disruptive element, and at bringing the crown into line once more with the broader evolutionary development of the life of the country.

Quite different was the character of liberalism in France, which typified rather clearly the political ideals of a continental country. Since the beginning of the modern period France had found herself hemmed in between two great monarchies, Spain and the Holy Roman Empire. The necessity of a continual struggle for existence soon brought the realization of the importance of concentration of forces and also of the need for the overthrow of feudal disorder by a strong centralized monarchy. Although the monarchy did not formally attack the privileges of the feudal classes it degraded their holdings to the role of free appanages and in this way undermined the prestige of the nobles, especially since the public services performed by them gradually dwindled in number. Centralization and leveling were the two most effective weapons of the monarchy and in both programs the rising bourgeoisie heartily concurred. But as the bourgeoisie became richer and more influential, as it acquired, with culture, confidence that it constituted the true generality of the nation, the heedless absolutism of the monarchy became increasingly intolerable. Dissatisfaction became keener with the growing realization that the leveling program had stopped halfway and that the remaining feudal privileges of the aristocracy continued with impunity to gall the shoulders of the bourgeoisie despite the growing importance of its economic functions. With a mounting sense of aggrieved dignity the impatient middle class, convinced gradually of the impasse confronting it, turned after a century of sporadic pressure to revolution; and when the king after a period of vacillating compromise threw his weight into the scales of reaction, no sentiment of tradition was vital enough to save the institu-

tion of the crown from the same extermination which had earlier befallen the aristocracy.

Proceeding from the rational principles of liberty and equality the French revolutionary liberals evolved a logically coherent mechanism for translating these principles into practise. This mechanism, derived partly from Montesquieu's rationalistic misinterpretation of essentially traditional and empiric features of the British constitution, was to a larger extent the outgrowth of the concept of equality as formulated by Rousseau. Whereas liberty involves differentiation and division, equality entails leveling and centralization. Liberty and equality, which find their embodiment respectively in liberalism and in democracy, are thus complementary and at the same time antithetical: complementary, inasmuch as absence of equality, at least equality of opportunity, degrades liberty to the level of exclusive and therefore oppressive privilege; antithetical, inasmuch as equality is conducive to indiscriminate leveling and indirectly to excessive centralization—to the detriment of such bulwarks of liberty as local associations and institutions. Since their first encounter in the heat of the French Revolution, liberalism and democracy have confronted each other in a variety of involved situations. The liberal tendencies of the movement of 1789 were gradually submerged under the democratic wave of 1793, and the latter ignoring the restraining counsels of liberty degenerated into the absolutism of the Convention and the Terror. Eventually, however, as a reaction to the horrors of the Jacobin dictatorship there reemerged the original concern for liberty. The first sustained attempt to solve the problem of restraining democratic excesses through a moderate liberal policy was made by Napoleon. By inaugurating a regime of enlightened Caesarism and especially by his opportunistic codifications he granted to the entire nation civil freedom and security in exchange for political freedom. But his increasingly arbitrary acts and usurpations under the pressure of war revealed to the people the precariousness of civil liberties unguaranteed by political rights and liberties. Accordingly in the nineteenth century, especially after the Restoration, the demands of French liberalism were formulated—notably by Constant, Royer-Collard, Guizot and de Tocqueville—in terms of constitutional guaranties capable of defining and delimiting the authority of the state in the interests of the individual citizen. At the outset chief emphasis was placed on written constitutions, elaborate systems of

and successfully set about the solution of the two problems in accordance with the aspirations of the best elements in the nation. In contradistinction to the German experience, however, unification did not entail the hegemony of the dominant province. Instead Piedmont was quietly assimilated into a broader national union, the capital being transferred from Turin to Florence and then to Rome. Unification received its effective sanction through a common liberal regime administered by a Parliament elected by the entire nation.

In the second half of the nineteenth century the principles of liberalism prevailed, with varying degrees of effectiveness, in practically all civilized countries. Where absolutistic and militaristic traditions were more tenacious, the political forms of liberalism were mutilated and attenuated, as under the Second Empire or under Bismarck; where industrial requirements imposed tariff barriers, the doctrine of free trade was held more or less in check; and where the churches were able to preserve at least a part of their privileges, religious freedom was limited. But freedom of conscience, freedom of association and freedom of the press were everywhere recognized in their main outlines. The civilized world presented the spectacle of a free play of forces limited only by self-imposed restraints and by the exigencies of community life as embodied in a non-authoritarian state. The social technique of liberalism found its support in the middle classes, both industrial and agrarian. The hereditary aristocracies remained on the whole unsympathetic, convinced that too great an emphasis on liberty threatened their economic privileges and social prestige. The emerging labor class, on the other hand, did not possess a sufficient degree of economic independence to make it sympathetic to the doctrine of individualistic self-reliance, which seemed to offer slight prospect of escape from the miseries of the factory system. But the predominance of the middle class under the banner of liberalism did not signify, at least in principle, the hegemony of one class over all others. The bourgeoisie opened wide its doors, parading as the "general class," emphasizing common rights rather than privileges and extolling the doctrine of free development of all the forces within the community. Its authority as a leader corresponded to the universality of its functions.

At the same time the very consolidation of liberalism ushered in a decadence which became especially marked and serious toward the end of

the nineteenth and during the twentieth century. The reasons for this decadence are manifold. Above all the attainment of power by the bourgeoisie brought about a situation inherent in every exercise of power: its liberal ideals spent their momentum. If as a champion of liberty this class was full of energy and fervor, as soon as it began to enjoy peaceful possession its ardor was dampened and gave way to conservative calculation and habits of mind inconsistent with the dictates of liberty. If in principle it claimed to exercise a mandate for the entire population, in reality it began to rule chiefly in its own interests and to transform liberties into rigid monopolistic privileges. These tendencies became especially marked under the presence of rising proletarian agitation which forced the group in power to assume increasingly defensive tactics. The reluctance on the part of the bourgeoisie to extend political rights to the people, its vigorous opposition to any measures of social and educational welfare which seemed to interfere with the freedom of enterprise in factories and with individual initiative in society, the creation of the new "baronies" of industry, finance and land—these tendencies were so many checks on the initial liberalism. But even apart from this widespread class selfishness and particularism the general trend of economic life in the nineteenth century favored the appearance of antiliberal forces. When industries were first born in England the best means for furthering their development was through freedom of initiative and through a competition untrammelled by outside chains. Manchesterian individualism was an appropriate expression for this first dynamic phase of expansion. But as soon as industry reached maturity, new needs began to make themselves felt. It became necessary to organize enterprises on larger and larger scales—thus limiting the initiative of the constituent elements—and also to meet growing international competition by protectionism. In defense against concentration by capital labor inaugurated its own program of concentration as the only means for bettering its condition. Both types of concentration assumed dictatorial forms, and the conflict between the two expressed itself in sporadic revolutionary outbursts. Liberalism thus found itself hemmed in between two opposed forces having in common only a basic antipathy to liberal tenets and technique. Individualism proved to be more and more inadequate for satisfying the new organic needs of society. While the political forms of liberalism still remained intact, the conflict for

power between the forces of plutocracy and those of economic democracy threatened to distort them beyond recognition. The concept of a free sphere of activities with an impartial police state gave way to the concept of a state which should be conquered as a vehicle for the attainment of class objectives. Under this double set of forces the jurisdiction of the state was gradually extended far beyond the boundaries surveyed by liberalism. The new state, claiming for itself an ever increasing number of functions which formerly had been the jealous possession of individuals, substituted a centralized bureaucracy for free initiative and by assuming the role of arbiter in social conflicts interfered with the spontaneous play of forces and assured dominance to the holders of power.

Despite these tendencies liberalism has displayed a marked degree of persistence. The very fact that liberal political forms continued to exist often mitigated the conflict of economic groups by transferring in many cases the struggle from the immediate economic sphere, with the threat of head on collision in public clashes, to the scene of parliamentary deliberation, with its greater amenities and traditions of compromise. Moreover despite the element of dictatorial dogmatism a certain amount of liberal ideology seeped down to the rank and file of the labor unions and was thus disseminated among the masses. On the other end the ruling groups often proved themselves sensitive to the needs of the new age. Suffrage was extended, numerous measures of social welfare were carried out and labor unions were given official recognition. These new tendencies were paralleled in the theoretical and ideological realm by a transition from the narrow Manchesterian individualism to a more organic liberalism, as formulated most systematically by T. H. Green and L. T. Hobhouse. The new liberal organon resolves the antinomy between individual liberty and authoritarian organization and directs its major energies to building up spontaneous organizations of individuals. It recognizes that labor unions, far from interfering with freedom of contract, as was believed by the individualists of the old school, are indispensable vehicles whereby the workers, who would be crushed in isolation, can combine to enforce their demands on employers.

These first manifestations of a liberal renaissance were cut short by the World War, which with its hegemonic ideals, its regime of command and subjection, blighted the spirit of liberty. Al-

though in the post-war period the menace of communism, which has forced the capitalistic countries to assume rigid positions of defense, as well as the ill feelings engendered by economic and political nationalism has still further aggravated antiliberal forces, it is possible that extreme oppression may once again generate new stimuli to liberty.

GUIDO DE RUGGIERO

See: LIBERTY; EQUALITY; DEMOCRACY; INDIVIDUALISM; NATURAL RIGHTS; CIVIL LIBERTIES; RADICALISM; RATIONALISM; PROGRESS; FRENCH REVOLUTION; PARTIES, POLITICAL; LAISSEZ FAIRE; ECONOMICS, section on CLASSICAL SCHOOL; FREE TRADE; CONSERVATISM. *See also* INTRODUCTION, sections on RISE OF LIBERALISM and THE REVOLUTIONS.

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LIBERTY. The basic idea of liberty as a part of the armory of human ideals goes back to the Greeks and is born, as the funeral oration of Pericles makes abundantly clear, of two notions: the first is the protection of the group from attack, the second is the ambition of the group to realize itself as fully as possible. In such an organic society the concept of individual liberty was virtually unknown. But when the city-state was absorbed by the idea of empire, new elements came into play. Stoicism especially gave birth to the idea of the individual and made his self-realization the main objective of human endeavor. Christianity added little to this notion by way of substantial content; but it added to its force the impetus of a religious sanction, not improbably the more powerful because Christianity was in its original phase essentially a society of the disinherited, to whom the idea of the eminent dignity of human personality as such would necessarily make an urgent appeal. In this stage it is difficult to dissociate the idea of liberty from that of equality, with which it is frequently intertwined. But as Christianity became the triumphant religion of the western world, the idea of equality became largely relegated to the theoretical sphere; and the liberty in which the church became interested was that of ecclesiastical groups seeking immunity from invasion at the hands of the secular power. In this aspect the liberty it sought was in essence indistinct from the liberty claimed by other groups in the mediaeval community. For until the end of the fifteenth century, roughly, the defense of particular liberties against invasion by external authority was the work of a functional group, such as the barons of Runnymede or the merchants of London. In this period liberty may be said to have resolved itself into a system of liberties or customary negative rights which were bought and sold between the parties for hard

cash. Custom became codified into law, and the invasion of custom came to be taken as a denial of liberty. There is little that is universal about such a conception of liberty; the group is largely defending itself from attack without undue regard to the interest of other groups. Thus in mediaeval England liberty had no meaning for the villein; and it is hardly illegitimate to argue that those who fought for liberty when they wrung Magna Carta from King John were good syndicalists whose minds were largely bounded by the narrow demands of a small group within the realm. Liberty has been as often the rallying cry of a selfish interest intent upon privilege for itself as it has been the basis for a demand which sought the realization of a good wider than that by which it was itself affected. It is therefore not unfair to describe the mediaeval idea of liberty as a system of corporate privileges wrung or purchased from the dominant power and affecting the individual less as himself than as a member of some group in whom those privileges cohere.

Philosophically no doubt restraint upon freedom of behavior has always been resented as an invasion of individual personality. But historically the best way of regarding the substance of liberty in the modern period as well as in the mediaeval is to realize that the new elements which enter into its composition at any given time have almost invariably been rationalizations of particular demands from some class or race or creed which have sought a place in the sun denied to them. Thus the history of religious liberty has been the demand for toleration by group after group of dissidents from recognized creeds, few of which have been willing to admit the claims of their rivals to toleration. So again the history of the franchise has been the demand of men for the right to share in political power, while many of those to whom the right has been granted have had no difficulty in urging that it was unwise or unjust to admit the next claimants to their place; Macaulay, who urged with passion the enfranchisement of the middle class, opposed not less urgently the grant of universal suffrage on the ground that it would necessarily dissolve the fabric of society.

The Reformation may be said to have been the most important factor in revitalizing the stoic doctrine of the primacy of the individual and in giving a new emphasis to individual rights as a separate and distinct subject of liberty. The breakdown of the *republica christiana* gave birth to new religions; these by demanding toleration

gave birth, even if painfully and in doubt, to the idea of liberty of conscience. The centralization of monarchical power consequent upon the breakdown of feudalism made political liberty more abstract and general than it had previously been; and the discovery of the printing press gave to the idea of freedom of expression within the general concept of political liberty a valuable concreteness which it had never before possessed. Nor is this all. The voyages of discovery synchronized with the emergence of a capitalist economy, and the importance given by the character of this economy to the individual entrepreneur made the problems of civil and economic liberty take on a new sharpness of form. By the time of Locke the idea of the individual as the embodiment of certain natural and imprescriptible rights which authority is not entitled to invade had become a commonplace of political speculation.

In a sense the emergence of the Reformation state on the ruins of the mediaeval commonwealth meant the substitution of the idea of the nation for the idea of the group; and it would not be illegitimate to argue that until the maturity of capitalism in the nineteenth century the struggle for national liberty proceeds along parallel lines with that of individual liberty. The two become until the threshold of our own day the two supreme embodiments of that passion for self-realization which has always lain at the root of the idea of liberty. The nation rejects the subordination of itself to an external authority just as the individual seeks to define for himself spheres of conduct into which external authority is not entitled to enter. Each seeks to make its claims as absolute as possible. The one for that end assumes the panoply of a sovereign state, thereby recognizing no superior; the other attempts to define the limits of governmental interference in terms of wants he discovers as brooking no denial. The history of the search for national liberty resulted in a chaos of sovereignties which stood in sharp contrast to that unified economic life made possible by scientific discovery; and it was clear that the history of the twentieth century would be largely occupied in bringing order into the anarchy to which the struggle for national liberty had given birth.

Something not dissimilar occurred in the history of individual liberty. So long as it was conceived as a body of absolute rights inherent in the individual and entitled to be exerted without regard to their social consequences, liberty was divorced from the ideas of both equality and

justice. The individual became the antithesis of the state; and liberty itself became, as with Herbert Spencer, a principle of anarchy rather than a body of claims to be read in the context of the social process. The reason for this evolution is clear. The body of ideas we call liberalism emphasized the undesirability of restraint, because those who gave it birth had mainly experienced the state as an organization interfering with the behavior they regarded as necessary to self-realization. Because of this they sought to reduce the state to the role of a mere guardian of order, keeping the ring in a vast competition of individual strivings of men who received in the social process the reward to which their effort and ability entitled them. *Laissez faire* was assumed at once to maximize self-realization on the one hand and on the other to serve the state by selecting the fittest for survival. Historic experience and biological principle seemed to the Victorian age to canonize the classic antithesis of individual and state.

The conception of an individual whose liberty was a function—the maintenance of order apart—of the weakness of the state was intelligible enough in its period. It failed to take account of the fact that the differences between men are too great under such conditions to make self-realization possible for more than a few. Liberty in a *laissez faire* society is attainable only by those who have the wealth or opportunity to purchase it; and these are always a negligible minority. Experience accordingly drove the state to interfere; and the liberal state of the nineteenth century was gradually replaced by the social service state of the twentieth. This may be described by saying that it again joins the ideal of liberty to that of equality, and this in the name of social justice. As the claims of liberty broke down the privileges of birth and creed, so with obvious logic they began an assault upon the claims of wealth also. The state was increasingly driven to widen its functions to mitigate the consequences of that social inequality to which the system of absolute liberty gave rise. Education, public health, provision against unemployment, housing, public parks and libraries are only a few of the outstanding services it was driven to organize in the interest of those who could not be expected to help themselves. Democratic agitation, which from 1600 to about 1870 had been occupied with the removal of barriers upon individual action, after 1870 began to press for the deliberate creation of equalitarian conditions. It has become clear,

in a word, that the idea of liberty depends upon the results of the social process at any given time; and it is against that background that its essential elements require analysis.

Liberty may be defined as the affirmation by an individual or group of his or its own essence. It seems to require the presence of three factors. It seeks in the first place a certain harmonious balance of personality; it requires on the negative side the absence of restraint upon the exercise of that affirmation; and it demands on the positive the organization of opportunities for the exercise of a continuous initiative. The problem of liberty has always been the prevention of those restraints, upon the one hand, that men at any given period are not prepared to tolerate and, upon the other, the organization of those opportunities the denial of which results in that sense of frustration which when widely felt leads to imminent or actual disorder.

So regarded, two things are clear about liberty. While its large outlines may have a fairly permanent character, its particular content is always changing with the conditions of time and place. To one age the demand for liberty may express itself in an insistence upon religious toleration; to another political enfranchisement may be its essential expression. This serves to remind us that liberty is always inherent in a social process and is unintelligible apart from it. Liberty therefore must always be conceived, if its philosophy is to be an adequate one, as related to law. It can never be absolute; some restraints are inevitable, some opportunities must be denied, simply because men have to live with one another and move differently to the attainment of antithetic desires. So closely moreover is this network interwoven that we cannot ever seek permanently to define a sphere of conduct within which freedom of action may be defined as liberty. For while we may claim, to take an obvious example, that there is unlikely to be liberty in any community in which there is no legal right to freedom of speech, we cannot maintain that an absolute right to say what he pleases is or should be inherent in any person; it is not, as Mr. Justice Holmes has said, a denial of freedom of speech when a man is prohibited from crying "Fire!" in a crowded theater.

Liberty, in a word, has to be reconciled with the necessities of the social process; it has to find terms upon which to live with authority. Those terms have never been absolute or unchanging; they have always been a function of the historic environment in some given time and place. And

that environment has always given birth to its own system of ideas, to which it has contributed some special emphasis in the notion of liberty, born of its peculiar conditions. That emphasis is always seeking its translation into an idea of law, whether by way of negation or affirmation; and the relation of authority to the substance of this idea is usually dependent upon what those who exercise authority consider will be the effect of the translation upon the order they seek to maintain. Trade unions demand the right to combine; authority admits that right or stigmatizes it as conspiracy, according to whether it considers the admission compatible with the way of life it seeks to uphold. A religious group demands the removal of the barriers upon the admission of its members to citizenship; the action of authority will turn upon its judgment of the consequences of the demand. Usually it will be found that the action of authority turns upon its estimate of the power possessed by those who make the demand and the way in which they will use their power; that is the truth embodied in Royer-Collard's great aphorism that liberty is the courage to resist.

The history of liberty since the Reformation has largely passed through two great periods. In the one the essence of the struggle for its realization has been to free the individual from subordination to a position, religious, political or economic, in which he has been placed by an authority external to himself. The effort has been the conferment upon him of rights—that is, of claims recognized by the law—which he is to enjoy without regard to the groups to which he may belong. This may be called the period of personal emancipation, and its classic expression is in the program of the French Revolution. The conception of society involved in it is that of an aggregate of persons; and it is argued that the fewer the restraints upon the free play of personality, the greater will be the liberty attained. Social effort is devoted to the destruction of privileges which inhere in some specially favored groups. It is generally conceived that the more men are let alone, the less positive the action of the state, the more likely is the individual to be free. In this period liberty is related to justice and equality in a negative way. My relation to my neighbor is deemed socially adequate if the state does not positively intervene to confer benefits upon him which I do not enjoy. Religious privilege, political privilege, privileges of birth or sex or race, little by little go by the board.

But in the period which roughly synchronizes with the growth of the modern proletariat it is rapidly discovered that the merely negative liberty to do what one can does not give freedom to the masses. We then enter upon the period of social emancipation. Government becomes increasingly paternalistic. It regulates the behavior of individuals and groups in the interest of an increasing complexion of equality in their lives. The size of the community tends to make the individual less and less significant. He has to obtain his liberty in concert with others similarly placed in the society to which he belongs. In this period the emphasis of liberty is predominantly in the economic sphere. Men become increasingly aware that grave inequalities in property mean grave differences in access to liberty. The struggle for freedom is largely transferred from the plane of political to that of economic rights. Men become less interested in the abstract fragment of political power an individual can secure than in the use of massed pressure of the groups to which they belong to secure an increasing share of the social product. Individualism gives way before socialism. The roots of liberty are held to be in the ownership and control of the instruments of production by the state, the latter using its power to distribute the results of its regulation with increasing approximation to equality. So long as there is inequality, it is argued, there cannot be liberty.

The historic inevitability of this evolution was seen a century ago by de Tocqueville. It is interesting to compare his insistence that the democratization of political power meant equality and that its absence would be regarded by the masses as oppression with the argument of Lord Acton that liberty and equality are antitheses. To the latter liberty was essentially an autocratic ideal; democracy destroyed individuality, which was the very pith of liberty, by seeking identity of conditions. The modern emphasis is rather toward the principle that material equality is growing inescapable and that the affirmation of personality must be effective upon an immaterial plane. It is found that doing as one likes, subject only to the demands of peace, is incompatible with either international or municipal necessities. We pass from contract to relation, as we have passed from status to contract. Men are so involved in intricate networks of relations that the place for their liberty is in a sphere where their behavior does not impinge upon that self-affirmation of others which is liberty.

In short, the problems of liberty in a plural-

istic world are extraordinarily complex. The individual who seeks self-realization finds himself confronted by a network of protective relationships which restrain him at every turn. Trade unions, professional and employers' associations, statutory controls of every kind, limit his power of choice by standardizing the manner of his effort. He has to adjust himself to an atmosphere in which there is hardly an aspect of his life not suffused at least partially with social regulation. To do anything he must be one with other men; for it is only by union with his fellows that he can hope to make an impact upon his environment. And even outside the realm in which the state defines the contours of his effort he finds himself surrounded by a complex of social customs and habits which force him despite himself into conventional modes of behavior. The scale of the great society is definitely unfavorable to the individuality of an earlier period.

One other aspect of this position is notable. The history of liberty has been the growth of a tendency to take for granted certain constituent elements in its substance. There is certainly greater religious freedom, for example, than at any previous time. But when the causes of this change are analyzed, it will be found that the growth of religious freedom is a function of the growth of religious indifference. The battle of liberty is not won but merely transferred to another portion of the field. As the contest over the place of individual property in the state becomes more sharp, the state limits freedom of expression and association in those matters which seem to it dangerous to the principles it seeks to impose. Social instability and liberty are antithetic terms. A society is tolerant when men do not challenge the foundations upon which it rests. Wherever these are in question, it moves rapidly to the conditions of dictatorship; and the elements of liberty are unattainable until a new and acceptable equilibrium has been reached.

It is therefore relatively easy to say what things go to make up liberty; it is extraordinarily difficult to say how its atmosphere can be guaranteed. Liberty can be resolved into a system of liberties: of speech, of association, of the right to share fully in political power, of religious belief, of full and undifferentiated protection by the law. But the question of giving to these separate liberties factual realization turns upon the objects to which they are devoted in any particular society at a given time. No doubt in Soviet Russia a Communist has a full sense of liberty; no doubt also he has a keen sense that

liberty is denied him in Fascist Italy. Liberty in fact always means in practise liberty within law, and law is the body of regulations enacted in a particular society for its protection. Their color for the most part depends upon its economic character. The main object of law is not the fulfilment of abstract justice but the conference of security upon a way of life which is deemed satisfactory by those who dominate the machinery of the state. Wherever my exercise of my liberty threatens this security, I shall always find that it is denied; and in an economically unequal society an effort on the part of the poor to alter in a radical way the property rights of the rich at once throws the whole scheme of liberties into jeopardy. In the last resort liberty is always a function of power.

It is no doubt true that men have endeavored to set the conditions upon which liberty depends beyond the reach of peradventure. Locke sought to do so by his conception of a limited liability state; but experience has grimly shown that in times of crisis the limits of the liability cannot be maintained. Montesquieu argued that liberty is born of the separation of powers in a state; but the truth of his argument is at bottom the very partial one that men are unlikely to be free unless the judicial authority is largely independent of executive and legislature. The constitutions of many modern states have sought to make the alterations of certain fundamentals a matter of special difficulty in order to protect the liberty of their subjects from invasion. Experience suggests that the technique is not without its value; but, as war and dictatorship have shown, it is an expedient for fair weather, always liable to fundamental neglect in times of crisis. It seemed to de Tocqueville that large local liberties were the secret of a general free atmosphere; liberty, he thought, is born of the wide distribution of power. But this appears to be true only when an equal society can take such advantage of the distribution as to make its benefits unbiased in their incidence; and in the struggle for such a society not the most unlikely thing is the rapid disappearance of this characteristic. The great idealist school of political philosophy has found the essence of freedom in obedience to the general will of the state; but it cannot be said that it has made clear, save to its own votaries, either the nature of a general will or the conditions under which a general will, if it exists, may be said to be in effective operation. An important school of modern publicists has sought to find the essential condition of lib-

erty in a supply of truthful news, since in its absence no rational judgment is possible. But it is clear that the supply of truthful news depends upon men being equally interested in the results which the impact of news may make upon opinion; and no such equal interest exists, above all in an economically unequal society.

Generally it may be argued that the existence of liberty depends upon our willingness to build the foundations of society upon the basis of rational justice and to adjust them to changing conditions in terms of reasoned discussion and not of violence. But if that be the case, the existence of liberty depends upon the attainment of a society in which men are recognized to have an equal claim upon the results of social effort and the general admission that if differences are to obtain these must be proved desirable in terms of rational justice also. In this background, as Aristotle saw at the very dawn of political science, liberty is unattainable until the passion for equality has been satisfied. For the failure to satisfy that passion in an adequate way prevents the emergence of equilibrium in the state. Its foundations are then in jeopardy because men are disputing about fundamentals. In such circumstances proscription and persecution are inevitable, since the community will lack that unified outlook upon the principles of its life of which liberty is the consequence. Men who differ upon ultimate matters, particularly in the realm of economic affairs, are rarely prepared to risk the prospect of defeat by submitting their disagreement to the arbitrament of reason. And when reason is at a discount, liberty has never had a serious prospect of survival.

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See: CIVIL LIBERTIES; FREEDOM OF SPEECH AND OF THE PRESS; FREEDOM OF ASSOCIATION; INDIVIDUALISM; LIBERALISM; LAISSEZ FAIRE; ANARCHISM; NATURAL RIGHTS; STATE; LAW; AUTHORITY; COERCION; OBEDIENCE, POLITICAL; DEMOCRACY; EQUALITY; PROPERTY; SOCIALISM; COMMUNISM; DICTATORSHIP; INTOLERANCE.

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LIBRARIES. See PUBLIC LIBRARIES.

LICENSING. The term license is variously used in law and government with correspondingly varied shades of connotation. Thus in liquor legislation high license was equivalent to a high license tax. Many excise taxes are levied in connection with and through the form of the licensing of some trade, occupation or use or possession of property; but if they are an important source of general revenue rather than simply a means of defraying the expense of administering the particular licensing regulation, they are more commonly spoken of as license taxes than simply as licenses or license fees. A license in the sense of a permit does not necessarily involve the idea of a fee and may be issued gratuitously.

In the law of real property a license signifies permissive use as a matter of indulgence without adverse claim of right on the part of the user or possibly, in a more technical sense, a right of occupancy that falls short of being a right in rem, being merely a claim against the owner; in the law of patent and copyright it signifies a delegation of use and exploitation on specified terms, the connotation of merely permissive use disappearing in this connection.

In the law of municipal corporations the grant by the governing body of a right to occupy streets for public utility appurtenances, such as tracks, poles, wires, pipes or tunnels, is sometimes spoken of as a license in order to distinguish it from a franchise—a term more appro-

priately used when the grant proceeds from the sovereign—and also to indicate in a somewhat vague manner that the occupancy falls short of an absolute right. It used, however, to be characteristic of this particular form of license that it was given in the form of a special legislative act of the municipal corporation; and however much in theory a competitive grant to a rival undertaking was possible, there was nothing to compel the rival grant, and so long as it was not forthcoming the grantee enjoyed a virtual monopoly. It is therefore quite customary, although perhaps legally inaccurate, to speak of these licenses as franchises.

The form of licensing to be considered here is the administrative lifting of a legislative prohibition. The primary legislative thought in licensing is not prohibition but regulation, to be made effective by the formal general denial of a right which is then made individually available by an administrative act of approval, certification, consent or permit. As a generic term certification might indeed be more appropriate than license; thus a marriage license is so termed only on account of its historical origin as a dispensation with the requirement of a publication of the banns, and when New York in 1896 abandoned the policy of discretionary powers in the control of the retail liquor trade, it dropped the term license and substituted the term liquor tax certificate.

Control through licensing means an administrative advance judgment regarding the presence of legal requirements or the absence of legal objections. It is the legislative policy and hope that law observance may thus be normally and expeditiously insured by eliminating the most obvious or serious sources of future trouble that would have to be dealt with by slower remedial processes.

The greater expedition of administrative action may be secured also without the expedient of the license by the substitution, at least provisionally, of administrative for judicial corrective processes. An administrative order may point out objectionable conditions and practises and direct that they be redressed, thus avoiding both the stigma and the hazard of penal prosecution. It is believed that this permits more elastic control than can be obtained by purely criminal legislation. Related to this method is the system of requiring notification of a proposed course of action to the administrative authorities, who are given a chance to interpose objections but whose failure to act leaves the

private party free to proceed. The Federal Trade Commission and (for a number of purposes) the Interstate Commerce Commission issue orders instead of licenses, and the English Theatre Act of 1843 gave stage censorship the form of a notification requirement subject to an administrative veto power.

The Federal Trade Commission Act, which is directed against unfair methods of competition, illustrates an advantage, from the legislative point of view, which the system of orders has over the system of licensing. It is possible to establish the former by mere reference to general categories of danger and abuse, applicable, for instance, to the entire range of public health or safety, or of interstate and foreign commerce; whereas licensing requirements must be more specific and as a method of dealing with unfair competition would present an extremely complex and difficult task of legislative selection and exemption of businesses or enterprises.

Even more important is the difference between the two systems with respect to the discretionary or non-discretionary quality of administrative action. An order based on defect or defect will necessarily have a quasi-judicial aspect and will therefore neither tend, on the one hand, to become mere matter of official routine nor, on the other, be issuable as a matter of free discretion; a licensing system has the widest choice with reference to the freedom of official action.

It is possible to establish license requirements from which administrative discretion is practically eliminated. This means that the conditions entitling to the license are fully specified by the law. If the ascertainment of these conditions involves the determination of facts, the non-discretionary character of the power expresses itself in the inconclusiveness of the administrative finding, which can always be judicially controlled by a mandamus proceeding. A legislative policy opposed to discretion, however, will endeavor to prevent factual controversy by prescribing methods of proof or by basing the license upon statements rather than facts. If this is carried to the point where the official act is one of mere certification, it may become difficult to distinguish the system from a mere registration requirement. Occasionally, however, the difference will become politically important. The legislature may desire to avoid even the semblance of an official consent requirement and yet deem public notice necessary; and it attains that end by attaching to the registration a right

to an immediate receipt. In France the right to freedom of assembly was established in this way in 1881.

Discretion enters into the licensing power most commonly through the framing of requirements by the legislature in such a manner that some difference of question as to compliance or fulfilment is regarded as legitimate. Within the limits of this legitimate difference official judgment is respected; beyond it there is legally "abuse of discretion," with the possibility of judicial redress. Such terms as reasonable, adequate, reputable, suitable or safe, which involve value judgments or future probabilities and a lack of objective certainty, are characteristic.

Where as a matter of professional experience value and probability judgments are fairly standardized, discretion may be reduced to the point at which there appears to be hardly more than a question of fact; on the other hand, the range of permissible considerations and their inherent uncertainty may be such as to widen discretion to the point of substantial freedom, as where the legislative reference is to the general welfare or the public good or detriment. Ordinarily such discretion ought not to be and is not delegated where licenses are required for the exercise of private rights. It may be delegated, however, where a primary policy of prohibition is to be relaxed under conditions of emergency or of exceptional hardship; there is then a dispensing rather than a licensing power; but modern legislative practise does not favor unregulated dispensing powers.

Of special importance is the question whether administrative discretion in granting or refusing a license may take into consideration community need and adequacy of existing supply. Formerly in the United States and now in Europe these were expressly made legitimate considerations in the licensing of the retail sale of intoxicating liquors. In the United States the same considerations underlie the "certificate of convenience and necessity" authorizing new public utility undertakings. Restriction to the need of the community is tinged with monopoly; and while monopoly may be justifiable it may lead to grave abuses, such as those connected with grant of monopolistic privileges in the past. The German Industrial Code (*Reichsgewerbeordnung*) therefore takes care to specify the cases in which alone the question of need may enter into licensing discretion; and the German Insurance Law of 1901, otherwise granting wide discretionary powers, expressly excludes the consideration of

need. The recent tendency in the United States has been to recognize in this respect the inherently monopolistic character of public utilities; this character has, however, been extended but slowly to other classes of business, such as banks or savings banks, and it is extremely significant that with regard to the business of manufacturing ice the United States Supreme Court declared the requirement of a "certificate of convenience and necessity" to be inconsistent with the constitutional guaranty of liberty [*New State Ice Co. v. Liebmann*, 52 S. Ct. 371 (1932)].

A discretionary licensing power is very much widened if the grant of the license may be burdened with conditions to be observed by the licensee. According to the better opinion this may not be done without express legislative authority. If the law is explicit as to power but also specifies the permissible conditions, the delegation of discretion is at least definitely circumscribed. But if the grant of power to attach conditions is unqualified, the only limitation is the one implied by law, that the condition must relate to matters within the general jurisdiction of the licensing authority and within the scope of the subject matter regulated [*Ann Arbor R. C. v. U. S.*, 281 U. S. 658 (1930)], and the result is a licensing discretion of extraordinary extent, permitting the laying down of rules not merely not expressed in the statute book but also varying from case to case. This power to impose conditions is a conspicuous feature accompanying some of the most important licensing requirements introduced by the Transportation Act of 1920. While it is difficult to foresee all its implications, its development will be watched with great interest; and it is fortunate in this respect that the reasoned decisions of the Interstate Commerce Commission will permit the tracing of the principles upon which the power purports to be exercised.

The question of the authorities to be vested with licensing powers can be answered only by a survey of the entire problem of administrative organization, for the power is apt to be reserved to the organ having principal charge of the subject matter of regulation, if not to the head of the administration. In England certain licensing powers continue to be exercised by justices of the peace, who were originally in many respects the principal local authority; the function is elsewhere not generally regarded as appropriate for either courts or judges. The German Industrial Code prescribes (sect. 21) that in the matter of licenses for noxious trades either the original

decision or the decision on appeal must be made by a board; but neither in England nor in the United States is there any clear evidence of a similar policy in favor of boards or commissions, and in the United States many important licensing powers are vested in heads of departments.

Procedural provisions of licensing laws serve the purpose either of safeguarding the public interest or of preventing injustice to the applicant. The former is the more important and is achieved principally through prescribed forms of applications and notice requirements. As a matter of principle the applicant himself is equitably entitled to fair consideration; but since through his application he has automatically a chance to present his case and since he has also a common law remedy of mandamus in case of arbitrary refusal, the occasional failure of the licensing statute to make provision for hearing presents no constitutional question. On the other hand, the Transportation Act of 1920 requires in a number of important cases that applications for permits or certificates shall be acted upon only after a hearing, and this is judicially interpreted as meaning that grant or refusal, as the case may be, must be supported by record evidence. A discretion that would otherwise be judicially uncontrollable by reason of the latitude of permissible considerations may in this way be tied to factual substantiation reviewable by a court [*Chicago Junction Case*, 264 U. S. 258 (1924)].

Where a license relates to some pursuit or activity extending over a period of time, the question of its revocability becomes important. There is no general common law or statutory rule that makes any license whatever revocable for cause; if the particular licensing statute is silent, the license is irrevocable. It is impossible to generalize upon legislative policy in this respect, save perhaps in Germany, where the Industrial Code (sect. 143) forbids revocation except in cases specified by federal law. The English liquor licensing act, in many respects a model, is extremely conservative in this matter; the licensing powers introduced by the United States Transportation Act of 1920 are unaccompanied by powers of revocation; New York pursues different policies with regard to banking and to insurance; Illinois has standardized the revocation of all professional licenses. Perhaps the observation may be hazarded that the present American tendency is to make professional or occupational licenses revocable for cause (but not at pleasure), that if causes are specified they

may include default or delinquency not amounting to crime, and that revocation is more commonly administrative than judicial, under elementary procedural safeguards and subject to judicial review upon common law principles.

Time limits on the grant of a license serve in a measure as a substitute for a power of revocation and have occasionally been urged with that object in view. In addition to those cases where the nature of the subject matter makes temporary licenses appropriate the practise is possible in connection with trades, occupations and professions. Unless there is practical assurance of renewal, preferably with special legal facilities for that purpose, a brief license tenure will not aid the morale of the occupation. German legislation is for this reason definitely opposed to time limits, but they are quite common in England and the United States.

Toward the middle of the nineteenth century it was possible to discern in the course of legislation a tendency hostile to the multiplication of license requirements: by the constitution of 1846 New York had abrogated its inspection law, which had started at an early period in the history of the state as measures for certifying commodities and had apparently degenerated into a mere method of fee exactions; the Prussian law of 1845 had inaugurated the principle of freedom of vocation, which was later carried into the German Industrial Code of 1869; England was dominated by ideas of *laissez faire*, which still survive in the absence of license requirements for banking and insurance; and American federal regulation was as yet confined to water borne commerce.

The German Industrial Code, first enacted at the height of the era of economic freedom, leaves positive licensing legislation to the states but establishes nationally operative principles as to what businesses may be subjected to license requirements. This comes quite close to establishing a constitutional status of freedom, but the act leaves outside of its scope very important fields of activity (the practise of law, education, insurance, mining, railway transportation). The main consideration in favor of licensability appears to be the possible tendency of a business to degenerate into a nuisance or its traditional connection with fraud or immorality; but without careful analysis any summary must be somewhat misleading. There is nothing in England or the United States comparable to this comprehensive legislative view. In the latter country sporadic decisions declaring a constitutional

right to exemption from license requirements (plumbers in Washington, accountants in Illinois) proceed on no clear theory, and it is easier to recognize a sphere of practical and customary than one of constitutional freedom.

In the United States the former qualification tests for crafts have largely disappeared, and common labor and employment (except of seamen and occasionally of miners) have become free and unchecked; certification systems are adopted where they are indispensable to the operation of a prohibitory policy, as in connection with child labor, but they would be repudiated, for example, as a means of making the restriction of hours of labor of females more effective. Commercial and industrial enterprise as such has remained notably free, and it is particularly significant that corporate facilities are no longer regarded as matter of licensing but virtually as merely matter of registration. Science, art and literature are generally free and the constitutional freedom of the press prevents the licensing of publications, just as religious freedom forbids qualification requirements for ministers. The freedom of art does not extend to public amusements; and although there is no censorship of the stage through licensing requirements, there is such censorship of moving pictures. There are systems of certifying public but not private teachers; educational institutions are free in most of the American states. Licensing requirements now generally apply to public utilities, banking, insurance and the professions. Where a particular service aspires toward a professional status, the pressure for qualification requirements and therefore for licensing comes from within, as in the case of realtors, accountants, nurses and social workers; in the case of dealers in securities and perhaps of insurance agents it seems to come from outside. Often the movement begins with certification facilities or designation privileges; the optional then tends to transform itself into a compulsory system.

Where safety, health and morals are involved, where private activities trench upon the conservation of public resources or where nationalistic interests are to be safeguarded, the license always suggests itself as a ready means of making regulation more effective, if only as a temporary measure pending the discovery of substantial principles of regulation.

Although general statements of tendency are hazardous, there seems to be evident at present a trend toward better safeguarding of the methods of licensing. This is manifested in part in a

reduction or elimination of the discretionary factor, in part in an increasing attention to organization procedure and review. Where some particular branch of regulation has a long legislative history, where interests subject to regulation are strongly entrenched or where a licensing policy is politically contested, considerable attention is likely to be given to administrative detail, whereas unqualified powers are apt to accompany an unclarified legislative policy; the minutiae of regulation in the English Licensing (Consolidation) Act of 1910 contrast in this respect with the few words of the English Petroleum Act of 1918.

As compared with the nineteenth century the present is an era of intensive governmental regulation. Even without a disposition to enhance official powers, perhaps notwithstanding a strong feeling against bureaucratic government, there are many fields in which administrative intervention and even administrative discretion are indispensable. The choice in these fields lies between administrative orders and administrative licenses. The former probably represent a more conservative exercise of public power; but with the burden of initiative thrown upon the government, the check is likely to be sporadic and confined to exceptional cases. A licensing system is the path of least resistance; it lends itself equally to wide discretion and to non-discretion, and private interests are usually able to accommodate themselves to it without undue difficulty. It is so convenient a method of checking the observance of governmental regulations that its permanence in the economy of legislation and administration appears to be assured; but the elaboration of administrative detail with a view to the most effective reconciliation of public and private interest will necessarily be a matter of prolonged experimentation.

ERNST FREUND

See: GOVERNMENT REGULATION OF INDUSTRY; POLICE POWER; LEGISLATION; DELEGATION OF POWERS; ADMINISTRATIVE LAW; COURTS, ADMINISTRATIVE; BOARDS, ADMINISTRATIVE; COMMISSIONS; MANDAMUS; EXCISE; INSPECTION; LIQUOR TRAFFIC; OCCUPATIONS; PROFESSIONS; AMUSEMENTS, PUBLIC.

Consult: Skyles, H. H., in *Corpus Juris*, ed. by William Mack and D. J. Kiser, vol. xxxvii (New York 1925) p. 162-300; Crecraft, E. W., *Government and Business* (Yonkers 1928) ch. xxx; Farrer, T. H., *The State in Its Relation to Trade* (new ed. London 1902); Freund, E., *Administrative Powers over Persons and Property* (Chicago 1928) pt. i, ch. vii, and pt. ii; Powell, T. R., "Administrative Exercise of the Police Power" in *Harvard Law Review*, vol. xxiv (1910-11) 268-89, 333-46, 441-59; Commonwealth Club of California,

Occupational Restrictions, 2 vols. (San Francisco 1929); Dillon, J. F., *Commentaries on the Law of Municipal Corporations*, 5 vols. (5th ed. Boston 1911), especially vol. ii, sects. 661-71, vol. iii, sects. 1128-31, 1164-69, and vol. iv, sects. 1366-71, 1408-12, 1616-24; McQuillin, E., *The Law of Municipal Corporations*, 7 vols. (2nd ed. Chicago 1928); Woodcock, H. B. D., in *Encyclopaedia of the Laws of England*, vol. viii (2nd ed. London 1907) p. 166-255; Rohrscheidt, Kurt von, *Vom Zunftzwange zur Gewerbefreiheit* (Berlin 1898); Pöbbram, Karl, *Geschichte der österreichischen Gewerbepolitik* (Leipsic 1907); Lagenstein, Fritz, *Die Gewerbepolizeierlaubnis*, Abhandlungen aus dem Staats-Verwaltungs- und Völkerrecht, vol. xi, pt. 2 (Tübingen 1912); Schlosser, A., *Die Widerruflichkeit der Polizeierlaubnisse* (Greifswald 1917); Bry, G. E., *Cours élémentaire de législation industrielle*, ed. by E. E. H. Perreau (6th ed. Paris 1921); Catlin, G. E. G., *Liquor Control* (London 1931), especially ch. vii; Greenwood, H. J., *Liquor Licensing System* (Leeds 1924).

LIEBEN, RICHARD (1842-1919), Austrian economist. Lieben studied at the polytechnic schools of Vienna and Karlsruhe and afterwards entered the banking house of Auspitz, Lieben and Company in Vienna. He was vice president of the Handels-Akademie and of the court of arbitration of the exchange. During the inquiry concerning the reform of the Austrian currency in 1892 Lieben advocated the adoption of the gold standard and argued convincingly that the ratio of the old silver currency to the new gold currency be determined according to the market value prevailing at the introduction of the new currency.

Lieben's most important contribution was his collaboration with Auspitz in their work *Untersuchungen über die Theorie des Preises* (Leipsic 1889). This outstanding contribution to mathematical economics presents a unified treatment of price as the central problem of economic theory; wages, rent and interest are treated as particular aspects of the general price problem. Starting from the concept of marginal utility the authors give an original graphic exposition of utility and cost curves and their respective derivatives—demand and supply curves—and arrive at the theory of general equilibrium. The analysis is pursued under the assumption both of stable and of variable estimations of the value of money. In the French translation of the *Untersuchungen* (*Recherches sur la théorie du prix*, 2 vols., Paris 1914) Lieben revised the theory which he had formerly held and defended against the criticism of Walras, that the supply and demand curves of a particular commodity can meet only at a single point.

OTTO WEINBERGER

Consult: Weinberger, Otto, "Rudolf Auspitz und

Richard Lieben" in *Zeitschrift für die gesamte Staatswissenschaft*, vol. xci (1931) 457-92; Pareto, Vilfredo, "La teoria dei prezzi dei Signori Auspitz e Lieben e le osservazioni del professore Walras" in *Giornale degli economisti*, 2nd ser., vol. iv (1892) 201-39; Zawadzki, Władysław, *Les mathématiques appliquées à l'économie politique* (Paris 1914) p. 307-15.

LIEBER, FRANCIS (1800-72), German-American political philosopher and publicist. Born in Berlin, Lieber served two terms in German prisons for his liberal activities and in 1827 emigrated to the United States. He entered actively into the cultural and political life of America. He compiled the *Encyclopaedia Americana* (13 vols., Philadelphia 1829-33), based in general upon Brockhaus' *Conversations-Lexikon*. From 1835 to 1856 he served as professor of history and political economy at South Carolina College and afterwards at Columbia University as professor of history and political science (1857-65) and professor of constitutional history and public law (1865-72). He was a thoroughgoing American nationalist: his numerous theoretical writings, notably the *Manual of Political Ethics and Civil Liberty and Self-Government*, supplied a philosophical basis for a policy of national supremacy in the federal union. He took the principal part in the work of a commission appointed by President Lincoln in 1862 to prepare a code of rules for the armies of the United States. Promulgated in April, 1863, as "Instructions for the Government of the Armies of the United States in the Field" (United States, Adjutant General's Office, *General Orders*, no. 100), this code has been accepted as the basis of subsequent American and European codifications of rules for warfare on land. As a political theorist Lieber repudiated the doctrine of social contract and rejected also "natural rights" in the sense of liberties retained from a prepolitical "state of nature." A nation he defined as a people made spontaneously co-operative by a common language and cultural tradition and by a common territorial habitation. In a somewhat vague theory he interpreted political sovereignty as an authority naturally inherent in a nation, manifested in a national public opinion and "the source of all other political authority" yet restrained in its actual power by a balanced distribution of functions among central governing agencies, by a concession of wide powers of self-government to local bodies and by the maintenance of an independent judiciary sustaining "natural" rights—rights, that is, which are essential to the normal development of man

in society and which receive persistent recognition in the traditional institutions and guaranties of a "common law." Lieber showed no striking originality in his political theory, and his style is somewhat prolix; but the comprehensive and systematic form of his writings and their breadth of philosophical and historical vision gave them great influence upon later American theorists, notably Theodore D. Woolsey and John W. Burgess.

FRANCIS W. COKER

Important works: *Manual of Political Ethics*, 2 vols. (Boston 1838-39; 2nd ed. rev. by T. D. Woolsey, Philadelphia 1875); *Legal and Political Hermeneutics* (Boston 1839, 3rd ed. St. Louis 1880); *On Civil Liberty and Self-Government* (Philadelphia 1853; 3rd rev. ed. by T. D. Woolsey, Philadelphia 1874); *Miscellaneous Writings*, ed. by D. C. Gilman, 2 vols. (Philadelphia 1881).

Consult: Harley, Lewis R., *Francis Lieber, His Life and Political Philosophy* (New York 1899); *Life and Letters of Francis Lieber*, ed. by Thomas Perry (Boston 1882); Nys, Ernest, "Francis Lieber: His Life and Work," tr. from French ms. by C. G. Fenwick and W. C. Carpenter, and Root, Elihu, "Francis Lieber" in *American Journal of International Law*, vol. v (1911) 84-117, 355-93, and vol. vii (1913) 453-69; Parrington, V. L., *Main Currents in American Thought*, 3 vols. (New York 1927-30) vol. ii, p. 93-98, and vol. iii, p. 119-20.

LIEBERMANN, AARON SAMUEL (c. 1840-80), Jewish socialist. Liebermann was born near Grodno. After an orthodox religious education and thorough training in Hebrew and the Talmud, in 1869 he entered the Technological Institute in St. Petersburg. In 1874 he led a revolutionary agitation in Vilna; pursued by the police he fled to London, where he founded a Jewish section of the Russian Social Revolutionary party and in 1876 the first Jewish trade union. He then moved to Vienna, where in 1877 he edited *Ha'emet* (The truth), the first Jewish socialist periodical in the Hebrew tongue. After serving prison sentences in Austria and Prussia he emigrated to the United States.

Liebermann was one of the first to discern the beginnings of class differentiation in the Jewish masses of the 1870's and to perceive the need and possibility of forming independent Jewish socialist organizations within the major socialist movements of the various countries. He was inspired by Lavrov's call to the Russian intelligentsia to go to the people and he called upon the Jewish intellectuals to bring the message of socialism to the Jewish masses. Keenly appreciative of the cultural values of the Jewish heritage, he combined his socialist ideal with the ideal of

Jewish national regeneration and the revival of the Hebrew language. Although Liebermann's activity was short lived and its immediate effect but slight, his work was significant because of its influence on the subsequent Jewish socialist movement.

JAKOB LESTSCHINSKY

Works: *Kitbe A. S. Liebermann*, ed. by M. Berkowitz (Tel Aviv 1928).

Consult: Tscherikower, A., "Der onhoib fun der yiddisher sotzialistisher bavegung" in *Yiddisher Visnshaftlicher Institut, Historishe Sektzye, Historishe shriften*, vol. i (Warsaw 1929) p. 469-532; Zitron, S. L., "Die ersten Sozialisten in der hebräischen Literatur" in *Jude*, vol. iii (1918-19) 394-404; Burgin, H., *Die geshichte fun der yiddisher arbeiter-bavegung* (in Yiddish) (New York 1915) p. 22-27, 36-43.

LIEBERMANN, FELIX (1851-1925), German historian, legal scholar and philologist. Liebermann was born in Berlin and was the son of a prominent Jewish textile manufacturer. In 1869 after completing his studies at the Werder Gymnasium in Berlin he spent nearly four years in business. He visited England, where he became proficient in the English tongue and acquired a keen interest in English institutional history. Since his main intellectual interests already lay in the direction of Germanic history and institutions he decided to forsake business for the life of a scholar. After attending lectures by Mommsen and Droysen at Berlin he continued his Germanic studies at Göttingen under Waitz, Pauli and Frensdorff, and there he learned also the rudiments of palaeography and laid the foundations of a broad culture. In 1875 he published as his doctoral dissertation at Göttingen the remarkable *Einleitung in den Dialogus de Scaccario* (Göttingen 1875), a work in which he gave abundant evidence of his exceptional powers as a textual critic and historian. Thereafter his chief interests in scholarship were centered in the English aspects of the history of Germanic laws and institutions; he became universally recognized as one of the most eminent mediaevalists and in particular as the foremost authority on the laws of the Anglo-Saxons and the legal literature of the Norman period of English history.

Liebermann was for a time on the editorial committee of the *Monumenta Germaniae historica* and prepared two volumes himself for the series. In numerous writings, which appeared from 1892 to 1901, he restored the law books of the Norman age; by his editions of contemporary treatises on Normanized Anglo-Saxon law he il-

luminated important aspects of the law of post-Conquest times; and from Anglo-Norman texts based on Anglo-Saxon sources he recovered much of the early English law before it had been subjected to Norman influence. Liebermann's most important work is *Die Gesetze der Angelsachsen* (3 vols., Halle 1903-16), which engaged most of his time for nearly thirty years. It was prepared at the request of the Savigny-Stiftung für Rechtsgeschichte, with the support of Konrad von Maurer and Heinrich Brunner. The work consists of a careful edition of the Anglo-Saxon laws, translation into German of all the original texts, a dictionary of the words used in the text, a glossary of the subject matter and introductions and explanatory notes to all the texts. The importance of this monumental work is that it established a text of the sources in keeping with the critical standards of modern times and provided a scholarly apparatus for the illumination of the text. While it has not entirely displaced some of the earlier editions of the Anglo-Saxon laws, notably Reinhold Schmid's *Gesetze der Angelsachsen* (Leipzig 1832, 2nd ed. 1858), it is nevertheless rightly regarded by scholars as one of the most important of all source books for the study of early English laws and institutions and within the field it covers as an indispensable guide in research. In addition to the works already mentioned Liebermann published many valuable articles and essays dealing with aspects of mediaeval history, especially the legal and institutional history of England.

H. D. HAZELTINE

Consult: Brandl, A., in *Archiv für das Studium der neueren Sprachen und Literaturen*, vol. cl (1926) 1-5; Heymann, Ernst, in *Zeitschrift der Savigny-Stiftung für Rechtsgeschichte, Germanistische Abteilung*, vol. xlv (1926) xxxiii-xxxix; Tout, T. F., in *History*, vol. x (1925-26) 311-19; Davis, H. W. C., in *English Historical Review*, vol. xli (1926) 91-97; Maitland, F. W., *Collected Papers*, ed. by H. A. L. Fisher, 3 vols. (Cambridge, Eng. 1911) vol. iii, p. 447-73.

LIEBIG, FREIHERR JUSTUS VON (1803-73), German chemist, pioneer in the application of chemistry to agriculture. After preliminary studies in natural science at Bonn and Erlangen Liebig went to Paris in 1822. There he made the friendship of Alexander von Humboldt, who introduced him to the laboratory of Gay-Lussac and later helped him to secure a professorship at the University of Giessen. He immediately established a laboratory to provide practical instruction, and through his effective presentation of the results of his investigation he soon made

Giessen the center of German chemical teaching and research. A large number of European and American students, who were to become world famous theoretical and applied chemists, received their training under his direction.

Liebig's interest in the application of chemistry to agriculture grew directly out of his theoretical work in organic chemistry, which demonstrated that so-called organic products can be created in the laboratory out of inorganic substances. In 1840 he made his report to the British Association for the Advancement of Science on organic chemistry and its applications to agriculture and physiology. In this treatise, revised and improved by him in numerous editions during his lifetime, he attacked the prevailing humus theory of plant growth, which held that plants derive all their nourishment from the decayed organic matter in the soil, and maintained that plants derive their carbon and nitrogen from the carbon dioxide and ammonia in the atmosphere while their other food elements, such as potassium, phosphorus, lime and soda, come ultimately from the minerals in the soil. These must be periodically replenished if fertility is to be maintained. He further developed the principle, later formulated as the Law of the Minimum, that "by the deficiency or absence of *one* necessary constituent, all the others being present, the soil is rendered barren for all those crops to the life of which *that one constituent* is indispensable." The determination of the indispensable elements for a given crop is obtainable through the analysis of the ash content of that plant, thus putting the whole problem of fertilizer on a quantitative scientific basis. For many years Liebig conducted practical experiments to determine the best methods for applying mineral fertilizer to the soils. Originally he applied the fertilizer in insoluble form, fearing that it would otherwise be washed away by rain; later he recognized his mistake and found that the soil itself has a capacity for absorbing and holding soluble minerals.

It is not to Liebig's discredit that his theories concerning plant nitrogen were later proved erroneous; investigations in the 1880's demonstrated that leguminous plants alone have the capacity of fixing nitrogen from the atmosphere. All other plants depend for their nitrogen supply on plant or animal fertilizer or on chemicals derived either from such sources or (since the beginning of the twentieth century) from electrical synthesis of atmospheric nitrogen. Leguminous plants, however, may be grown

without a nitrogen supply in the soil or may be used to enrich the soil for other crops by being plowed in as green manure. Subsequent research has also shown that Liebig's emphasis on artificial manures underestimated the importance of natural fertilizers, which serve to improve the texture of the soil and to conserve its moisture.

Without disparaging the work of other chemists who worked in this field—Boussingault in France and Lawes and Gilbert in England—Liebig may be regarded as the real founder of modern agricultural chemistry; more than any other he is responsible for the revolution in agriculture created by the use of artificial fertilizers.

FRITZ GIESECKE

Important works: *Die Chemie in ihrer Anwendung auf Agrikultur und Physiologie* (Brunswick 1840; 9th ed. by Philipp Zöller, 1876), pt. i tr. by Lyon Playfair (4th ed. London 1847), and pt. ii tr. by John Blyth from 7th German ed. as *The Natural Laws of Husbandry* (London 1863); *Grundsätze der Agrikultur-Chemie, mit Rücksicht auf die in England angestellten Untersuchungen* (Brunswick 1855, 2nd ed. 1855), English translation (London 1855); *Über Theorie und Praxis in der Landwirtschaft* (Brunswick 1856); *Naturwissenschaftliche Briefe über die moderne Landwirtschaft* (Munich 1859), tr. and ed. by John Blyth (London 1859).

Consult: Liebig, Justus von, "Justus von Liebig, Eigenhändige biographische Aufzeichnungen," ed. by Georg von Liebig in *Deutsche Rundschau*, vol. lxvi (1891) 30–39, tr. by J. C. Brown in *Chemical News*, vol. lxiii (1891) 265–67, 276–78, reprinted in Smithsonian Institution, *Annual Report, 1890–91* (1893) 257–68; Volhard, J., *Justus von Liebig*, 2 vols. (Leipzig 1909); Shenstone, W. A., *Justus von Liebig: His Life and Work* (London 1895); Honcamp, F., *Justus Liebig und sein Einfluss auf die Entwicklung der Landwirtschaft*, Rostocker Universitäts-Reden, no. 6 (Rostock 1928); Goltz, Theodor von der, *Geschichte der deutschen Landwirtschaft*, 2 vols. (Stuttgart 1902–03) vol. ii, p. 277–300. For contemporary criticism of Liebig's work, see Lawes, J. B., and Gilbert, J. H., "On Agricultural Chemistry, Especially in Relation to the Mineral Theory of Baron Liebig," and "On Some Points Connected with Agricultural Chemistry" in Royal Agricultural Society of England, *Journal*, vol. xii (1851) 1–40, and vol. xvi (1855) 411–502.

LIEBKNECHT, KARL (1871–1919), German socialist leader. Karl Liebknecht, whose father Wilhelm Liebknecht was one of the founders and recognized leaders of the German Social Democratic movement, was an outstanding representative of left wing socialism. A lawyer by profession, in 1908 he became a member of the Prussian Chamber of Deputies and in 1912 a member of the German Reichstag, and he engaged actively in the struggle for more militant party tactics. He particularly opposed German

militarism; this opposition, which he linked up with the demand for a more revolutionary socialist policy, met with much sympathy, especially among the socialist youth organizations.

At the outbreak of the World War Liebknecht was one of the few in the Social Democratic Reichstag delegation who were opposed to the war and to the granting of war credits. At the caucus on August 4, 1914, however, he yielded to party discipline and voted for the credits. In December, 1914, he voted as the only Social Democratic deputy against the new demand for credit, an act which acquired world significance and strengthened the antiwar minority in the socialist International. Together with Rosa Luxemburg he founded the Spartakusbund, which condemned the official socialist support of the war and proclaimed, at first only within the Social Democratic party and then directly among the masses as well, the revolutionary struggle against the German government and its policy. In order to suppress Liebknecht's activities the government called him to military service, but in 1916 he took part as an active soldier in an antiwar street demonstration in Berlin. He was arrested and sentenced by a war tribunal to four years' imprisonment, which won him much sympathy as a martyr to the cause of peace and workers' freedom even beyond the circle of the Spartakusbund. In October, 1918, he was liberated by an amnesty.

While it was Liebknecht who struck the first blows for liberty on behalf of the revolutionary workers of Germany, the November revolution of 1918 not only took place without his assistance but was in fact guided by forces foreign to his ideas; thus from the very first Liebknecht came into sharp opposition to the new German socialist-republican government. He advocated alliance with the Russian Bolsheviks, although, like Rosa Luxemburg, he did not approve of their theory and practise in important details. In December, 1918, the Spartakusbund became the Communist party of Germany. Liebknecht had no illusion that the greater part of the German people was ready for a communist revolution and therefore urged a preparatory campaign of agitation and organization. When, however, an uprising of revolutionary workers broke out in January, 1919, both Liebknecht and Rosa Luxemburg threw in their lot with the combatants. After the suppression of the January uprising by the socialist-republican government Liebknecht was murdered by a group of monarchist officers. He was essentially an agitator and organizer, not

a theorist; his significance lies in the practical role which he played at a critical moment in the development of the German socialist movement.

ARTHUR ROSENBERG

Important works: *Militarismus und Antimilitarismus* (Berlin 1907), tr. as *Militarism* (New York 1917); *The Future Belongs to the People*, Speeches Made since the Beginning of the War, ed. and tr. by S. Zimand (New York 1918); *Reden und Aufsätze* (Hamburg 1921); *Politische Aufzeichnungen aus seinem Nachlass, geschrieben in den Jahren 1917-18* (Berlin 1921); *Studien über die Bewegungsgesetze der gesellschaftlichen Entwicklung* (Munich 1922).

Consult: Schumann, Harry, *Karl Liebknecht: ein unpolitisches Bild seiner Persönlichkeit* (Dresden 1919); Zinoviev, G., and Trotzky, L., *Karl Liebknecht und Rosa Luxemburg* (Petrograd 1920); Radek, Karl, *Rosa Luxemburg, Karl Liebknecht, Leo Jogiches* (Hamburg 1921); Kautsky, K., *Rosa Luxemburg, Karl Liebknecht, Leo Jogiches; ihre Bedeutung für die deutsche Sozialdemokratie* (Berlin 1921); Adler, Max, *Helden der sozialen Revolution* (Berlin 1926) ch. iii; Lair, Maurice, "Karl Liebknecht" in *Revue des sciences politiques*, vol. 1 (1927) 349-92.

LIEBKNECHT, WILHELM (1826-1900), German socialist leader. The Liebknecht family was one of scholars and state officials related to Luther. Liebknecht studied theology, philosophy and philology at the universities of Giessen and Berlin, from which he was dismissed on account of his socialist and Polish sympathies. He took part in the German Revolution of 1848 and after its collapse found an asylum in London, where he lived as newspaper correspondent and teacher until 1862.

In London Liebknecht associated with Karl Marx, by whom he was greatly influenced but with whom also he already disagreed on many fundamental issues. He was not a consistent Marxist; his democratic ideology clashed with the Marxist conception of class struggle and revolutionary dictatorship. He remained essentially a Forty-Eighter, striving for a *Germania magna* gathering all her children into a united commonwealth governed by the principles of human freedom and social justice. Liebknecht passionately abhorred Bismarckian statecraft. In 1862 he joined the editorial staff of the Berlin *Norddeutsche allgemeine Zeitung*, but as soon as he became aware that it was in the service of Bismarck he resigned his position. The government took its revenge and expelled him from Prussia, whereupon he removed in 1865 to Leipzig, won August Bebel for socialism and helped to organize the democratic-socialist elements into the Eisenach party in opposition to the Lassallean General Workers' Union, which be-

tween 1867 and 1870 favored Prussian policy. As member of the Reichstag in 1870 he fearlessly opposed the war with France and together with Bebel voted against the military appropriations. Later in a pamphlet *Die Emser Depesche* (Nuremberg 1891, 7th ed. 1899) he revealed to the world Bismarck's falsification of the Ems dispatch (July, 1870), which precipitated the Franco-Prussian War. In 1893 Bismarck acknowledged Liebknecht's critical acumen by publicly admitting that he had "altered the Ems dispatch from a *chamade* into a *fanfare*." For his international, pacifist attitude Liebknecht was charged in 1872 at Leipsic with high treason and sentenced to two years' detention in a fortress. His speeches at the trial were instinct with courage and eloquence; he transformed the court into a platform for socialist agitation.

Except in the years 1868 and 1869, during which he sometimes expressed social revolutionary ideas, Liebknecht worked to the end of his life for peaceful social reform and democratic institutions. After the unification of the Eisenach party with the Lassalleans at Gotha in 1875 he was among the leaders who drew upon themselves Marx' sharp criticism of the Gotha program as an abandonment of revolutionary objectives and tactics. In the period 1898-1900 he fought against the revisionism of Eduard Bernstein and others who wished to adapt the revolutionary theory of the party to its moderate social reform practises; he adopted the official centrist position of the party. At the age of seventy Liebknecht went to prison for four months on a charge of quasi-lese majesty. He edited the leading party paper, *Vorwärts*, played an important role in party life during the period of Bismarck's antisocialist laws and profoundly influenced German socialist journalism; his articles served as models to a generation of working class writers.

MAX BEER

Important works: *Über die politische Stellung der Sozial-Demokratie* (Leipsic 1869); *Wissen ist Macht* (Zurich 1872, new ed. Berlin 1894); *Zur Grund- und Bodenfrage* (Leipsic 1876); *Robert Blum und seine Zeit* (Nuremberg 1888, 2nd ed. 1890); *Ein Blick in die neue Welt* (Stuttgart 1887); *Geschichte der französischen Revolution* (Berlin 1890); *Die Emser Depesche* (Nuremberg 1891, 7th ed. 1899); *Robert Owen* (Nuremberg 1892); *Karl Marx zum Gedächtnis* (Nuremberg 1896), tr. by E. Untermann (Chicago 1901); *Weltpolitik, Chinawirren, Transvaalkrieg* (Dresden 1900).

Consult: *Leipziger Hochverratsprozess gegen Liebknecht, Bebel und Hepner*, ed. by W. Liebknecht and others (Berlin 1894); Eisner, Kurt, *Wilhelm Liebknecht, sein Leben und Wirken* (2nd ed. Berlin 1906); Lord, R. H.,

The Origins of the War of 1870, New Documents from the German Archives, Harvard Historical Studies, no. xxviii (Cambridge, Mass. 1924).

LIEN. The term lien is generally used in Anglo-American law to describe any jural privilege which secures a debt against an owner's specific property. The historic common law lien was a possessory lien on personal property; that is, the lienor had the privilege of retaining the possession of the debtor's property until the former's claim with respect to that particular property had been satisfied. Possession was the essential characteristic of the relationship, because if the lienor gave up his possession he lost his privilege. On the other hand, the debtor's title to the property, although divorced from its possession, was unimpaired, because the lienor could not by sale or otherwise affect the debtor's title.

A lien is to be distinguished from a pledge, by which possession but not title is transferred, because a pledge carries with it a power of sale over the property. A lien is also to be distinguished from a mortgage (until recently only of real property), by which title but not possession is transferred by what purports to be a conveyance to the creditor, subject to a provision calling for a reconveyance to the debtor if the debt is paid by a certain day. A lien is entirely distinct from the debt or obligation which it secures. It is only a remedy to compel payment, so that unless the debt is paid the extinguishment of the lien does not affect the existence of the debt. A lien is of course extinguished by payment or by tender of payment. As Salmond well puts it, the lien is a shadow cast by the debt upon the property of the debtor.

Historically the common law possessory lien arose apparently out of the lien which the owner of land had for the keep of cattle which had strayed on to the land. Such a lien existed as early as 1371. A lien was then recognized in the case of personal property in the possession of innkeepers and next of common carriers, as a corollary to the obligatory duty of both these classes to serve the general public. By the late fifteenth century usage had extended the protection of the lien to tailors and other persons who had worked on chattels. Ultimately it was held that mechanics, artisans and tradesmen generally were entitled to the benefit of a lien. The early doctrine ultimately developed into the general rule that whenever property was delivered by the owner to another for a special purpose, it might be retained by the latter until the

particular debt thereby incurred was discharged.

Beside this common law lien there grew up another type of possessory lien, called the general lien, by which all the property of the debtor in the possession of a lienor was retained to secure general indebtedness due on a general account. The courts have always viewed this general lien with distrust, and it has not been widely extended. The liens which have been enforced most frequently are those of lawyers, banks and stockbrokers, all of relatively recent origin. In furtherance of commercial transactions it has also become established that special or general liens can be created by the express agreement of the parties where they would otherwise not exist.

The extension of common law liens by contractual agreement coincided with the development of equitable doctrines and the creation of the equitable lien in certain types of cases, so that contractual or quasi-contractual obligations could be enforced by a remedy directly against the specific property or its proceeds: in contracts relating to specific property where one party had performed or stood ready to perform his part of an agreement; in quasi-contracts where money or property had been unlawfully obtained, it or its proceeds being traceable and being in the hands of those who were not able to claim in good faith to retain it. In these types of cases courts of equity in order to enforce the obligations more effectually than by granting merely a pecuniary remedy of damages, as at common law, have treated the relationship as creating a charge upon or hypothecation of the particular thing. An equitable lien is therefore a kind of charge or encumbrance on specific property or its proceeds to secure the payment of an obligation directly connected with that property. It will at once be seen that the equitable lien has wholly departed from the necessity for possession inherent in the common law lien. The earliest equitable lien appears to have been that of an unpaid vendor of land, which was recognized at least by the late fifteenth century.

The maritime lien is still another type of lien and resembles in some respects both the equitable lien and the hypothec of the civil law. Possession of a vessel is hardly ever necessary for the creation of maritime liens, which arise from tort relations, such as collisions, as well as from such contract or quasi-contract relations as seamen's wages, salvage, bottomry and the supply of necessities. Maritime liens adhere to a vessel even in the hands of an innocent purchaser and upon the theory of the preserva-

tion of the res outrank one another inversely from the date of original creation, contrary to all other kinds of liens.

The chief defect of the common law lien was that the mere right of retention was not coupled with a power of sale. This defect was not remedied in England until well into the nineteenth century and then by statute only in a few cases where there was a duty to serve the public—thus in the cases of innkeepers, wharfingers and railroad companies [Innkeepers Act, (1878) 41 & 42 Vict., c. 38, sect. 1; Merchant Shipping Act, (1894) 57 & 58 Vict., c. 60, sects. 497-98; Railways Clauses Consolidation Act, (1845) 8 & 9 Vict., c. 20].

In the United States the right of sale has been conferred more generally and many new types of liens have been created by statute. The state of New York, possessing large rural as well as large urban interests, may be chosen as typical. Apart from mechanics' liens, its statutes provide for liens either with reference to certain things or in favor of certain types of persons as follows: vessels; monuments, gravestones and cemetery structures; labor on stone; artisans for work on personal property; hotel, apartment hotel, inn, boarding or lodging house keepers; factors; bailees of animals; bailees of motor vehicles or motor cycles; manufacturers and throwsters of silk goods; work on watches, clocks and jewelry; truckmen and draymen; motion picture film laboratories; chattel mortgages on stocks of merchandise and on canal craft; United States government internal revenue taxes. A simple and fair method is provided for the enforcement of all liens by sale of the property at public auction, which must be advertised; previous notice must be given to the debtor, who is afforded an opportunity to redeem his property. The statutory right of sale has in effect transformed the common law lien into a statutory pledge.

Where more than one lien exists, that which is prior in time generally prevails. A prior equitable lien is superior to a subsequent legal lien by judgment. A common law lien, however, is superior to all other rights in the property, while on the contrary a statutory or contractual lien is subordinate to all prior existing rights in the property. Equitable liens are assignable, so much so that an assignment of the debt carries the lien with it as a necessary incident; but common law and statutory liens are generally considered to be merely a personal privilege and so not assignable; in a few states they may be

assigned if the property is simultaneously delivered to the assignee.

Legal privileges analogous to the lien exist in continental countries either by way of so-called rights of retention or by way of preferences which in effect create implied hypothecs; that is, rights of pledge, arising by operation of law. The presence of the former in continental legal systems may be ascribed primarily to their development in German common law doctrine, which thus again showed the influence of the Germanic emphasis upon possession. The preferences of the continental law may be traced to the Roman law of implied hypothec, which might extend either to all or to some particular part of the property of a debtor. It seems, however, that in the later Roman law the *exceptio doli generalis* in effect secured rights of retention, since it was available against claims the assertion of which for some reason would have been unequitable.

The French Civil Code shows plainly the influence of the Roman law. Its system is primarily one of preferences or implied hypothecs. A preference is defined by the code as "a right which the nature of the claim gives to a creditor to be preferred to other creditors, even mortgagees" (§2095). Such preferences are general, applying to all of a debtor's property, when the claim is for funeral expenses, expenses of the last illness, servants' wages for the previous and the current year and the like (§2101); or particular, applying only to specified objects of personal property, as, for example, to a thing for expenses incurred in keeping it in repair, to the effects of a traveler for board furnished by an innkeeper or to a thing carried for expenses of carriage (§2102). Pure rights of retention exist in favor of unpaid vendors (Civ. §§1612, 1613), innkeepers and carriers (Civ. §§1782, 1948, 1952) which are essentially similar to the common law liens but which are exceptional in the general legal scheme of France. Other privileges are created by the Code of Commerce for the charges of factors (§95); for freight (§§307, 308); and for maritime claims generally (§191), in which case the lien is on the ship.

The German Civil Code recognizes a general right of retention subject to *Konnexität*; that is, to some connection between claims (§273). In certain cases, however, a right of retention is expressly negatived. Ordinarily there is no right of sale, but this exists in particular cases where the code adds a right to pledge; thus in the case of lessors and lessees, contractors, and inn-

keepers under certain circumstances (§§559, 585, 590, 647, 704). The German Code of Commerce of 1897, effective 1900, lays further emphasis on possession and provides that every merchant, including by definition bankers, carriers, factors, warehousemen, brokers, booksellers, publishers and manufacturers (§1), shall have the right to retain by agreement the possession of personal property to secure an existing indebtedness arising out of bilateral mercantile transactions (§369) or in the case of bankruptcy an unmatured indebtedness (§370). The right is enforced by sale as if there were a pledge (§371). In addition factors have a similar right of retention for their commissions, expenses and advances (§§397, 398, 410, 411), as have warehousemen for warehousing charges (§421) and carriers for carriage (§§440, 441); these rights of pledge subsist as long as possession is retained of a bill of lading, carrier's receipt or warehouse receipt; where there are several rights of pledge, the latest creditor in point of time is preferred (§443). The German maritime law provides the usual privileges for maritime transactions, most of which do not contemplate or require a retention of possession. The Swiss Civil Code of 1907, effective 1912 (there is no separate Swiss commercial code) provides for rights of retention (§§895-898) when a creditor is in possession of movable chattels or securities. The creditor, however, is also given a right of sale, after previous notice to the debtor to meet the obligation. Under the Swiss code there are no privileges apart from possession as under the French code.

The mechanic's lien is an American invention which may be ascribed to democratic sympathies with the rights of labor, although the first mechanic's lien law, which was enacted by Maryland in 1791, was intended primarily to spur the building of the national capital at Washington. The next mechanic's lien law was passed in Pennsylvania in 1803. The early laws were sometimes highly local—New York's first "lien law" of 1830 applied only to New York City. The special recognition of a mechanic's lien was necessary because of the legal and practical difficulties inherent in the distinction made between real and personal property. It was expensive and troublesome for a workman to collect for materials supplied in building, which were considered to become part of the real property when attached, and for labor expended thereon. A further difficulty often arose from the fact that the workman's only claim was against a contractor and not directly

against the landowner. By the modern statutes contractors, subcontractors, laborers and materialmen have generally been given liens directly against the land and buildings improved. In their operation, however, such statutory liens are more like the equitable lien, since the property is not in the possession of the workman. Usually a notice of lien must be filed, and within a specified time thereafter an action must be commenced to enforce the lien; the action is very much like one to foreclose a mortgage. Likewise execution issues primarily against the real property, and if it is insufficient to satisfy the judgment there may be a further judgment for the deficiency against the person contractually liable.

Mechanics' lien laws have spread not only from state to state in the United States but across the American frontier into the Canadian provinces. In England there is no exact equivalent to the mechanic's lien, but the Preferential Payments in Bankruptcy Act of 1888 gives a preference to ordinary laborers and workmen for two months' wages, but not exceeding £25; to general wages and salaries for four months, but not exceeding £50; and to agricultural laborers hired on a lump sum annual basis for claims not exceeding one year's wages.

In France §2103 and §2110 of the Civil Code create a privilege against real property, subject to certain formalities of registration, in favor of architects, contractors, masons and other workmen who have erected, reconstructed or repaired buildings and those who have furnished the money to pay them; this privilege, however, is of limited value because it is restricted to the additional value of the property resulting from the work performed. In Germany §648 of the Civil Code creates a privilege in favor of a contractor, who can require a cautionary hypothec (cf. §§1184, 1185) either when the work is performed or from time to time as it progresses. By the provisions of the *Bauforderungsicherungsgesetz* of June 1, 1909, this privilege was vastly better implemented and extended to workmen. By the Swiss Civil Code of 1912 workmen and contractors are given a statutory mortgage on the property which their labor and materials have improved. This right cannot be renounced in advance (§837). A public record is kept and entry on it, which is required, can be made up to three months after the completion of the work (§839). Several of such mortgages on the same property rank equally, as there is no priority in time (§840); any prior general mort-

gagee who knowingly has permitted the property to be overmortgaged must compensate the workmen, out of the value of the buildings, to the extent of the excess of his mortgage if the workmen suffer any loss on foreclosing (§841). The Swiss practise is thus very similar to the American.

The lien has survived in modern law as a legalized species of self-protection. It is the special safeguard of small claims. To establish the ideal relationship it is necessary to adjust various considerations. To leave the full legal and equitable ownership in the debtor and to permit him also to retain possession may facilitate fraud by making possible a sale to innocent purchasers or the obtaining of unwarranted credit on the basis of the debtor's fictitious appearance of wealth. On the other hand, if the small lienor has to employ much legal procedure to obtain the property in order to satisfy the debt, the resulting expense renders his lien worthless as a practical matter. Secret liens are obviously unfair. Public recording alone is not satisfactory, because so far as small claims are concerned it is derisory to require a search through public records, although this answers well enough when claims are large. Wherever the nature of the property permits, the ends of justice would seem to be best served by a possessory lien coupled with a power of sale.

FREDERIC ROCKWELL SANBORN

See: OWNERSHIP; POSSESSION; BAILMENT; COMMON CARRIER; HOTELS; WAREHOUSING; LANDLORD AND TENANT; PAWNBROKING; MORTGAGE; PLEDGE.

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LIETZ, HERMANN (1868-1919), German educator. After studying theology and philosophy at Jena Lietz worked under Rein in the practise school at Jena and taught for a year in Cecil Reddie's school, Abbotsholme, England. His ideas were much influenced by Rousseau, Pestalozzi, Jean Paul and Goethe. The son of a rich peasant and a peasant himself all his life, Lietz felt urban school life, classroom immobility and rigidity of schedules, hours and examinations to be psychologically harmful to children. He attacked the old Prussian schools, all very military in tone, offering instead an educational program designed to benefit both body and mind. In 1898 he founded at Ilsenburg the first German *Landerziehungsheim*, later reserved for children from eight to twelve, where play was made the center of all educational activities. In 1901 he founded a second one in Thuringia for boys from twelve to sixteen, where manual training, agriculture, carpentry and farm work were the central studies. In 1904 he established a third near Fulda for young men from sixteen to twenty; it was devoted to science and art, but play and manual work were part of the educational program. Shortly before the World War drew him into the army Lietz founded the *Landwaisenheim* at Veckenstedt. In all these schools

there were many free pupils. The system of schools was supplemented by an advisory organization of pupils' parents and a yearbook and magazine devoted to discussions of school questions. This pioneer work in establishing rural education centers developed especially in Wickersdorf and Odenwald, but the centers established there broke violently with Lietz in 1906. Nearly 150 schools adopted the name *Landerziehungsheim* before the International Bureau of New Schools in Geneva defined the term by thirty criteria. A foundation took over the schools Lietz established and added others; in 1931 six were in existence. More important, state schools have adopted many reforms initiated by Lietz, and his ideas have influenced the German youth movement.

ADOLPHE FERRIÈRE

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LIFE EXTENSION MOVEMENT. The desire to prolong life and to recapture youth and health is as old as the human race. Priests, physicians, alchemists and magicians have sought and sold elixirs of life. Paracelsus in the sixteenth century purveyed an elixir of aloes, myrrh and saffron; Roger Bacon put his faith in viper's flesh, to be taken only when the sun is ascending. The use of magical specifics to outwit death, although still prevalent, has diminished with the advance of general scientific knowledge. Even quacks and cultists have turned from the sale of magical charms to the promotion of pseudo-hygienic regimes. Commercial agencies exploit human credulity by selling health magazines, membership in health clubs, books containing formulae for longevity, exercising appliances and courses in physical culture. Semireligious movements feature health rejuvenation; anti-tobacco and anti-alcohol evangelists use pleas for the extension of life in their propaganda. The Christian Science church has been the most

influential of the spiritual health cults. Its founder, Mary Baker Eddy, declared that "man is, not *shall be*, perfect and immortal" (*Science and Health*, new ed. Boston 1906, p. 428); and although she admitted later that physical death was possible, her disciple Augusta Stetson proclaimed until the end that she would never die. Pseudo-hygienic cults promoting a longer life seize upon some single factor, often of real but limited value, and ignore all other aspects of the health situation; an example is the health movement recently popular known as Fletcherism, which elaborated the doctrine of the necessity of thorough mastication of food into a system of "dietetic righteousness."

Until the human race has been educated out of its credulity, short cuts to health and long life will continue to enlist at least temporary followings. For the development of a social movement of any significance, however, there must be an end generally accepted as desirable and a means capable of achieving it. As long as dominant opinion looked forward piously to eternal life after death there could be no social movement for the prolongation of earthly existence, however large the trade in elixirs. In the modern world health and long life are respectable social ideals and scientific medicine has amply demonstrated its efficacy in promoting them. The average length of life in Europe and America has increased with the advance of medical knowledge and its application. At the end of the eighteenth century the expectation of life at birth in Massachusetts was about thirty-five years; in the United States Registration Area in 1900 it was forty-nine years and it is now about fifty-eight years. The increased expectation of life has been confined to the lower age groups and has been due almost entirely to the reduction in infant mortality and in the mortality from the serious infectious diseases; no gain has been made in the expectation of life after forty-five.

It has been only within the last twenty-five years that there has developed an organized movement with the prolongation of life as its avowed objective. The modern life extension movement aims at the fuller application of preventive medicine in all its branches; more especially it strives to reduce the mortality from the serious chronic diseases of middle age—heart and kidney diseases and cancer—which have assumed increasing importance as causes of death. The corner stone of the movement is the promotion of periodic health examinations, with

the object of insuring early diagnosis and prompt correction of incipient degenerative processes and the instruction of the patient in the manner of living best adapted to his condition. The impetus behind the development of the movement was the economic interest of life insurance companies in reduced mortality. At a meeting of the Association of Life Insurance Presidents in 1909 Irving Fisher urged as a sound business investment the promotion of health work and the provision of free periodic health examinations to life insurance policyholders, and the movement which was subsequently initiated has made the life insurance companies among the most powerful forces in American health work today. The movement is now by no means confined to insurance companies and is being vigorously supported by the public health services and the medical profession. The companies cooperate with the public health authorities in general educational work, conducting health demonstrations, issuing pamphlets and giving lectures; they make special efforts to keep their own policyholders alive by the offer of free periodic health examinations, by sending out health literature and in some cases by providing free nursing service to industrial policyholders. Although the movement is mainly American, some Canadian, English, Australian and Japanese companies have engaged in health activities.

The importance of periodic health examinations has been publicized especially by the Life Extension Institute, Inc., which was organized in 1913 as a self-supporting stock company to make such examinations for life insurance companies, industrial and social organizations and for individuals; in 1929 it served over forty life insurance companies and examined about 130,000 people. There are also organizations which sell periodic laboratory tests by mail and issue health advice to their clients.

The attempt to control serious chronic diseases through the education of the individual in personal hygiene has become an increasingly important factor in the modern public health campaign; in this work public health nurses have performed excellent service. In 1922 the American Public Health Association adopted as its goal the addition of twenty years to the average length of life within the next fifty years.

Preventive medicine must depend largely upon the individual practitioner; yet until ten years ago the medical profession did little to encourage periodic health examinations. This was due partly to restrictions imposed by the

code of medical ethics on anything resembling advertising; perhaps an equal deterrent has been the tendency on the part of physicians to regard only the treatment of the sick as their concern and to leave prevention to the public health departments. But at its meetings in 1922 and 1924 the American Medical Association adopted resolutions urging its members to promote periodic health examinations. The organized medical profession now engages extensively in educational work; books for the use of physicians on preventive medicine have been issued by professional associations; and the preventive aspects of individual medical practise are being stressed in the medical schools. In addition to the insurance companies, the public health services and the medical profession voluntary organizations, such as the National Tuberculosis Association, the American Social Hygiene Association, the American Society for the Control of Cancer and the American Heart Association, encourage research, promote healthful legislation and engage in educational work. The American public has been slow to respond to this extensive propaganda. Only about 10 percent of insured persons to whom it is offered have availed themselves of the free examination service; a survey by the Commission on Medical Education (*Report*, no. i, New Haven 1927, p. 63) revealed that only 3.4 percent of the office visits to general practitioners were for physical examinations and that of these 95 percent were for life insurance purposes.

Since the initiation of the movement the expectation of life has almost attained the addition of fifteen years suggested by Fisher in 1909 on the basis of his calculation of the degree of preventability of the principal causes of death. This increase has been due mainly to the reduction in the mortality from tuberculosis, typhoid, diphtheria, diarrhoea and enteritis. No decline is discernible in death rates from cancer, heart disease or nephritis. It is probable that a further reduction in the incidence of infectious diseases of childhood and venereal diseases will result in a reduced mortality from heart and kidney diseases and that medical research will finally succeed in transferring cancer into the category of preventable diseases. There is every prospect that the advance in general longevity will continue until the expectation of life approaches the limit of the natural life span, the length of which has not yet been conclusively determined. Fisher, assuming a natural life span of one hundred years and the continuation of the present

rate of increase in the average length of life, estimates that an American infant born in the year 2000 may have an expectation of life of eighty-two years. Hornell Hart, ignoring biological limitations and assuming as a probability the continuance of the present rate of acceleration in the increase in the average length of life, calculates that a life expectation of two hundred years may be reached during the next century.

BARBARA JONES

See: MORTALITY; MORBIDITY; MEDICINE; PUBLIC HEALTH; NURSING; HEALTH EDUCATION; HEALTH CENTERS; SANITATION; LIFE INSURANCE; COMMUNICABLE DISEASES, CONTROL OF; EPIDEMICS; POPULATION; STATISTICS.

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LIFE INSURANCE. The general principle of insurance is perhaps as old as civilization. It consists in making a small present sacrifice in order either to avoid a greater loss or to reap a reward at a future time. The development of

monetary contracts as they now exist has been much more recent, although they were known in early times. In the second century of the Christian era the Roman *collegia* built up funds to provide burial for their members; and some insurance of this sort, often connected with crafts or guilds, has been maintained in many communities from that time to the present day. Marine insurance was in all probability the earliest form of corporate insurance involving monetary benefits.

Life insurance, a more modern product, has two principal origins. The first is in marine insurance. The owners of vessels found that under the trade practises of early days the life of the captain sent off on a trading voyage was almost as important as the safety of the ship itself. There consequently arose the system of insuring not only against the loss of the vessel but also of the captain's life for such period as the voyage might cover. The second origin is in the craft guilds. From earliest times men of similar occupation or with common interests bound themselves together in friendly association. Members were helped in sickness and old age, and burials were arranged. On the death of a member it became customary to seek charitable donations on behalf of the family. This charitable practise developed into a right, and each surviving member was assessed a fixed sum for each death. In some cases the contributions were made definite, and the amount was distributed among the beneficiaries. Out of these practises arose the early forms of life insurance along assessment lines. When a corporation was formed in order to transact this business on a commercial basis, it was necessary to charge each entrant a fixed amount in advance; that is to say, a premium, to prevent the danger of non-payment of assessments at the end of the year. Accordingly estimates had to be made at the beginning of the year and a premium had to be assessed according to the magnitude of the sums which would probably be paid at the end of the year.

During the seventeenth and the early eighteenth century a number of scientists, notably Sir William Petty, Dr. Edmund Halley and Abraham de Moivre, had devoted much attention to the mortality rate of the population. They found that while it was impossible to foretell the date of death of an individual the death rate of any large group of persons remained consistent and predictable from year to year and also that there was a steady decrease in physical

resistance throughout later life. It was seen that the assessment system contained a fundamental weakness, since the risk of death increased with age and men of the average age of sixty must show a different death rate from that of a group of the average age of thirty or forty. Equal assessments for all ages as at first practised were therefore unjust. One of the best of the old assessment corporations, the Amicable Society for a Perpetual Assurance Office, which had been chartered in England in 1706, refused to accept for insurance any applicant over the age of forty-five. This was a partial meeting of the difficulty.

Out of these speculations there developed the Society for Equitable Assurances on Lives and Survivorships, which was planned and promoted in London in 1756. Much opposition to the granting of a charter arose and business was therefore begun in 1762 under a deed of settlement. The company, familiarly known as "The Old Equitable," is still active, proving the wisdom of its founders. Formed by policyholders for their mutual protection, it was the first to be based on a scientific calculation of level premiums for life with the provision that no increase in the premium could take place despite the increase of mortality with advancing years. It must be readily understood that because a man of thirty-five, who pays a level premium for life, is subject to an increasing mortality rate, he must in the early years pay a larger sum than is needed for the immediate cost. The excess must be carried forward at interest to meet the heavier mortality charge when it arises. This is a fundamental concept in level premium life insurance and it accounts for the large accumulation of company funds, which are not earnings or surplus but would be more accurately termed accruing liabilities.

In calculating a fixed premium for life it is necessary to use two factors, the influences of which will be felt for a long time in the future. These are a death rate and an interest rate. A third element in practical management, the expense of handling the business, is a factor depending on individual conditions and control. The first premiums of the Equitable Society were calculated from observations on mortality in the city of London. These were unduly high and were changed in 1782 to the basis of the well known Northampton Table—also high for men in good circumstances and in good health. The contrast between the death rates of the Northampton Table (based on the mortality ex-

periences of the English city of Northampton over the period 1735 to 1780) and those of the American Men Table (covering an investigation from 1900 to 1915 and based on the experiences of life insurance companies) is illuminating. The figures in Table I are for a few specimen ages. The Northampton Table, because it dealt

with the general population of a town less healthy than many other communities, was faulty in construction, so that the death rates were exaggerated. On the other hand, the American Men Table deals with modern conditions and healthy male lives all of which have been approved for life insurance purposes.

TABLE I
NORTHAMPTON AND AMERICAN MEN MORTALITY TABLES, SELECTED AGES

NORTHAMPTON TABLE (1735-80)				AMERICAN MEN TABLE (1900-15)			
AGE	LIVING AT AGE	DYING IN YEAR	DEATHS PER 1000 LIVING	AGE	LIVING AT AGE	DYING IN YEAR	DEATHS PER 1000 LIVING
15	5423	50	9.2	15	100,000	346	3.46
20	5132	72	14.0	20	98,199	385	3.92
21	5060	75	14.8	21	97,814	393	4.02
22	4985	75	15.0	22	97,421	401	4.12
30	4385	75	17.1	30	94,114	420	4.46
40	3635	76	20.9	40	89,653	524	5.84
50	2857	81	28.4	50	82,805	959	11.58
60	2038	82	40.2	60	69,555	1856	26.68
70	1232	80	64.9	70	46,185	2839	61.47

Source: Price, Richard, *Observations on Reversionary Payments* . . . (4th ed. London 1783) vol. ii, p. 311, 313; and United States, Bureau of the Census, *United States Life Tables* . . . (1921) 226-39.

A mortality table purports to trace a complete body of persons (as, for example, a group of 100,000) from the cradle to the grave. If the rates of mortality for each age can be determined, there can be derived from them a complete table from the beginning to the end of life. The death rate of 3.92 per 1000 persons derived from 98,199 persons at the age of twenty is given above. If similar rates are obtained for all other ages, then, commencing with an arbitrary number such as 100,000 (called the radix of the table), the number who would die in each year of age from such death rates can be computed. These rates if obtained over a brief period of years do not take into account the climatic, social or racial changes which may occur in a long period, such as one hundred years, which the table in theory purports to cover.

The early forms of life insurance were either for temporary uses or were ordinary life policies as developed by the Equitable Society. If each of the 98,199 persons living at the age of twenty is insured for \$1000, according to the American Men Table \$385,000 is needed at the end of the year for payment of all claims. The premium paid at the beginning of the year earns a year's interest, making it necessary to discount this \$385,000. At $3\frac{1}{2}$ percent interest the present value at the beginning of the year is \$385,000

divided by 1.035, or \$371,982. The share of each one of the 98,199 would therefore be \$3.79. This is the net cost of \$1000 insurance to be paid in event of death within one year. For a similar \$1000 in the second year the amount to be provided would be \$393,000, and discounted for two years the single premium for the second year would be \$3.74. Therefore the single premium for two years will be the sum of the two, or \$7.53. To determine the single premium for the whole of life this process has to be continued for every age to the limit of the table. A popular error is that the function known as the "expectation of life," which is the average number of years lived by a group of any given age, can be used for premium and other calculations. But this method is mathematically incorrect and is therefore not used by actuaries.

Developments on the European continent and in the United States did not follow far behind those of England. In France the Compagnie Royale d'Assurance sur la Vie was authorized to begin business in 1787 and enjoyed a state monopoly until 1792. In 1820 with the chartering of the Compagnie d'Assurances Générales sur la Vie French life insurance was definitely launched on its modern career, and before a decade had elapsed some seven companies were dividing the field. In Germany the first success-

ful companies to make their appearance were the Lebensversicherungsbank für Deutschland, chartered in 1828 at Gotha, and the Deutsche Lebensversicherungsgesellschaft, chartered in the same year at Lübeck. Branches of English companies were soon to be found operating in Germany, Holland and the Scandinavian countries; the branches of French companies found profitable fields of activity in Spain, Belgium, Italy and Switzerland. Prior to 1843 most of the life insurance in the United States was written by foreign companies, which were subjected to but slight supervision. With the opening of offices in 1843 by the New England Mutual Life Insurance Company and the Mutual Life Insurance Company of New York there began a new era in life insurance history in the United States; by 1870 there were 110 life insurance companies in the country which were operating either as mutual, joint stock or joint stock and participating companies.

While the policies of these early American companies followed scientific principles, many of the conditions written into them appear illiberal by modern standards. Thus the policies of pre-Civil War America had no surrender values, made no provisions for loans to policyholders and allowed no days of grace. Policies became void in many circumstances that would today be considered unfair: suicide or death by dueling, for example, voided the policy; a trip to North Carolina, Georgia or Florida or an ocean voyage (without permit and extra premium) likewise made the policy "null, void and of no effect." Today travel, residence and occupation are entirely free after a policy has been issued; suicide is a risk that is covered after a period of not more than two years from issue. Even if the insured discontinues his premium payments and neglects to claim any equity, a fair and just return is made and is maintained on the company's books, whether or not the insured protects his own interests.

During the period from 1855 to 1872 the subject of state supervision came increasingly to be discussed. It was felt that life insurance should be guarded by the state as a semipublic trust. Massachusetts led the way by creating a board of insurance commissioners and in 1855 established the first state insurance department headed by a paid commissioner. New York followed Massachusetts' example in 1859, and before 1870 thirty-five of the states had either established special insurance departments or delegated supervision to specified officials. Rules

were devised for licensing all life insurance companies and they were called upon to submit statements on standard forms and observe fixed rules in the valuation of their business and assets in order to secure a certainty of payment to beneficiaries under their contracts. The tables of mortality and the maximum rate of interest to be used were prescribed by law. Massachusetts not only was a pioneer in state control, but in choosing Elizur Wright as its first insurance commissioner it gave a great impetus to the development of life insurance methods along sound lines. Wright was an original thinker and did not always follow the practices of Europe, although he studied them. The annual net premium valuation, the licensing of agents, the maintenance and investment of all reserves for United States business within the United States, non-forfeiture benefits in event of lapse and the prohibition of the writing of life insurance by any corporation granting fire, marine and some other forms were features introduced by Wright; in all these particulars the American requirements differed from those of Europe. These supervisory rules were difficult of adoption by European companies and resulted in a gradual withdrawal of practically all such companies from the United States. Since the 1880's little life insurance has been granted in the United States except by domestic and Canadian companies.

In the last quarter of the nineteenth century there developed in the United States a speculative phase in life insurance contracts through the issue of the so-called semitontine policies. The word tontine implies an enhanced benefit to survivors after a period like twenty years, earned at the expense of those who meanwhile die or discontinue their contracts. Such policies furnished guaranteed benefits in event of death but provided large returns to survivors, partly accumulated from year to year and partly made up of values lapsed and forfeited by those who failed to maintain their insurance. These tontine surplus policies were merged into the deferred dividend idea; both resulted in much disappointment. The interest earnings, which were 6 percent or 7 percent when the tontines and estimates were originally issued in the 1870's, fell rapidly and by 1900 an interest rate of 4 percent was not unusual. Surplus earnings were therefore much less than those estimated.

One of the effects of the high priced tontine policies was a renewal of interest in cheap insurance in term forms; there even took place

a revival of the ancient idea of assessment insurance. From 1875 to 1895 many corporations were launched to write assessment insurance, some of them being fraternal organizations and others assessment insurance corporations. The advocates of this type of insurance insisted so much upon the novelty of their plan that it became common to speak of the regular, full reserve and level premium plans as "old line." After twenty or twenty-five years of operation an assessment company usually begins to find the mortality rate increasing. The average age becomes greater, necessitating increases in assessments. Any increase in cost makes policyholders scrutinize their insurance and some of the healthier give up assessment protection, possibly taking permanent forms at fixed rates. The agents of the regular companies aid this movement. These discontinuances of the policies on healthy lives raise the proportion of the unhealthy, causing a still higher mortality rate with the need of still further increased charges. When once this process starts it becomes cumulative and ends in the disintegration of the corporation.

The result of the deferred dividend and assessment plans was a large number of disappointed policyholders of both types in the period from 1897 to 1904 and the rise of a powerful wave of popular dissatisfaction. Contributing to the same dissatisfaction was the appearance of a factional dispute in one of the large New York companies, the stock control of which was held by a single person who did not retain the confidence of the directors. Public opinion was aroused against the principle that the interests of thousands of policyholders might be jeopardized by a small stock interest held by one man. Other items of unfavorable publicity and some glaring instances of extravagance were brought to light, all of which resulted in the appointment by the New York legislature in 1905 of a joint legislative committee with sweeping powers, the so-called Armstrong Committee, to investigate life insurance and the life insurance companies licensed in New York state. The investigation threw a lurid light on some wrongful practises, and changes in the New York law were made. The following brief summary of the legislative changes will show the lines of popular clamor and the nature of the abuses which were attacked.

First, syndicate participations were prohibited. Second, facilities were created for converting a stock corporation into a mutual life

insurance company. Third, elaborate regulations for voting by policyholders in mutual life insurance companies, including the right to vote by mail, were set up. Fourth, directors' qualification was extended to permit any policyholder in a stock life insurance company to qualify for directorship. Fifth, investment powers were restricted; especially stock and collateral trust bonds were prohibited as investments for life insurance companies. Sixth, officers and directors were not to derive any personal profit by commission or otherwise from any investment or loan made on behalf of the company. Seventh, the formation of any new assessment insurance corporation was prohibited. Eighth, a limitation was placed on agency expenses and commissions. At first this was too drastic, making inadequate allowances which had to be expanded. The principle is still in effect. Ninth, a limitation was placed on surplus. The original provisions of this were also too drastic and were later extended. The early limits were clearly unsafe, if indeed any limit can be justified. Tenth, the amount of new business which a company could write annually was restricted. This too was afterward expanded. Eleventh, a company issuing participating business could not also issue non-participating. All mutual companies could issue participating business only. A stock company could select either participating or non-participating but could not write both after January 1, 1907. Twelfth, there was to be a compulsory annual distribution of surplus. Thirteenth, there was to be the compulsory use of a standard policy form in New York state by all life insurance companies. This was put in effect for a year or two, but it prevented initiative and improvement; the law was afterward repealed and standard provisions substituted. Fourteenth, the companies' liabilities were to be evaluated by the "select and ultimate" method. An attempt was made to compel the sale of all stockholdings and of real estate within five years after acquisition. The superintendent of insurance was given discretionary power to extend this period, and extensions were granted from time to time. Some holdings could not have been sold at anything like their true value if this five-year order had been held effective.

As a result of the facilities for mutualization extended by the New York law two of the largest and one of the smaller New York companies retired their stock and became mutual companies. A third large corporation in New Jersey took steps toward the same end, depos-

iting its stock with trustees on behalf of the policyholders. These transformations took place without being accompanied by any essential change in the executive management of any one of the companies.

The life insurance disclosures were discussed and considered by nearly every state in the union. One of the early results of the New York investigation was the meeting at Chicago in February, 1906, of a national conference of governors, attorneys general and state insurance commissioners, which in turn set up a Committee on Uniform Legislation (the so-called Committee of Fifteen). Other investigations took

place, notably in Canada and Wisconsin, and many new laws were enacted. Most of the states followed with more or less modification the recommendations of the Committee of Fifteen. The companies generally were shown to be financially sound and the publicity attending these inquiries and legislative activities gave an extraordinary impetus to the industry throughout the country. The amount of insurance in force in the United States almost doubled over the decade between 1901 and 1910, increased more than two and a half times in the next ten years and again increased more than two and a half times in the decade of the 1920's. Table II shows

TABLE II

GROWTH OF THE BUSINESS OF AMERICAN LEGAL RESERVE LIFE INSURANCE COMPANIES, 1850-1931

YEAR	INSURANCE IN FORCE	ASSETS	PAYMENTS TO POLICYHOLDERS AND BENEFICIARIES	NEW BUSINESS
1850	\$ 47,862,221	\$ 4,138,391	\$ 642,495	\$ 14,233,193
1870*	2,023,884,955	269,520,440	44,949,257	587,863,236
1890	4,048,846,781	770,972,061	90,007,519	1,144,114,318
1900	8,562,080,722	1,742,414,173	168,687,601	1,973,611,066
1910	16,404,261,042	3,875,877,059	387,302,073	2,557,053,467
1920	42,281,390,527	7,319,997,019	744,649,245	10,105,444,804
1930	107,948,277,732	18,879,611,097	2,246,776,105	19,019,790,453
1931	108,885,562,894	20,159,939,830	2,606,551,153	17,226,248,427

* Figures for 1870 include only companies authorized to do business in New York state, probably 97 percent of the total for the country.

Source: For 1860-1910, Elston, J. S., in Actuarial Society of America, *Transactions*, vol. xxvii (1926) 331-41; for 1920 and 1930, *Insurance Year Book Life Insurance*, for 1920-21 and for 1930-31; for 1931, computations of Association of Life Insurance Presidents.

the great expansion of life insurance in the United States over the period extending from 1850 to 1931.

Two events in the last fifteen years have particularly aided the growth of life insurance. The first of these was the adoption by the government of war risk insurance, devised with the intention of forestalling claims for bonuses or pensions on the part of veterans. In 1917, when the United States entered the World War, life insurance up to \$10,000 was offered to every soldier at standard net rates for yearly term policies. The nation assumed the extra hazard of war and the hazards of mutilation, disablement and disease, for which fair and just compensation was promised. Most of the soldiers in the United States Army had the maximum insurance during service, the premiums being deducted from monthly pay. This brought to the attention of more than 4,000,000 young men the benefits of life insurance in its protective character. As if to emphasize its value the world was soon after afflicted by the influenza epidemic

of 1918-19, when thousands of young men and women apparently in perfect physical condition were suddenly carried off. Other stimulating influences on life insurance were seen in new business developments, such as group insurance for employees of large corporations, provision for the new inheritance taxes and the development of insurance trusts.

While the primary purpose of life insurance is protection of the family, the building up of an estate and guarding against an impecunious old age have become important phases. Policies with limited premiums create an equity more quickly than the ordinary life policy, while endowments, whereby the sum insured matures at a fixed time, make a still more direct provision for old age and furnish an income which can be determined in advance. Policies on partners, with the sum insured payable at the first death, provide funds at a crucial time. Creditors take out insurance on the lives of their debtors; borrowers protect a loan or mortgage; parents effect educational endowments to secure higher

education for their children. One of the early purposes was to furnish annuities in exchange either for a fixed purchase price or for annual premiums. An annuity may be on a single life or on two or more lives, as on husband and wife with benefit payable as long as either lives. It may be immediate or deferred, the deferred annuity being usually purchased by annual premium. Various selling features have had more or less temporary popularity, such as gold bond contracts, policies with coupons attached for dividends, part premium note settlements and the like. Payment of double face amount in event of accidental death can be secured at a small extra charge of about \$1.25 per \$1000. Between 1910 and 1930 a special disability benefit attained a great vogue: many companies granted a waiver of premium and an income of \$10 per \$1000 per month in event of total and permanent disability from accident or disease. This has been modified by most companies, however, and the income benefit has been discontinued by many because of serious losses in the later 1920's, when poor business conditions led to an unusually heavy claim rate under the appearance of disability. All of these developments have added to the popularity of life insurance and fostered its growth during the last ten years.

The scientific part of life insurance is handled by actuaries; and the development of actuarial science has kept pace with the activity and growth of life insurance. Sixty or seventy years ago after a college course in mathematics a young man could acquire a fair degree of proficiency by becoming associated with the actuary of one of the life companies. In Great Britain the actuaries formed the Institute of Actuaries in 1848, meeting regularly for study of common problems. In America a similar step was taken in 1889 when the Actuarial Society of America was formed by a group of actuaries living for the most part on the eastern seaboard. This society at first admitted members on the recommendation of its fellows, but soon it was found desirable to examine applicants; now nearly everyone who becomes a fellow passes a series of strict examinations. Twenty years later in 1909 another actuarial body, the American Institute of Actuaries, was started in Chicago. The two groups work in harmony and friendly accord; they conduct their examinations up to the associateship degree through a joint examining board. These examinations cover certain branches of higher mathematics and the more technical phases of life contingency calculations, also the

theories of interest, annuities, mortality tables, premiums and the like. The fellowship examinations are broader in their scope and deal with the commercial side of life insurance in the selection of risks, keeping of accounts, banking, finance and the elements of insurance law. In 1932 the Actuarial Society of America had 315 fellows and 263 associates. Some of these were also members of the American Institute of Actuaries, which reported 172 fellows and 175 associates. Both of these bodies advise their students as to the best courses of study and as to other matters; they also maintain libraries for research and reference.

The education of the public in life insurance is conducted principally by the agency forces. In the eighteenth century it was customary for business men to seek out the insurance company and apply for life insurance. This practise continued into the nineteenth century. But in the period from 1800 to 1830 a number of companies started to write life insurance as a business venture, as was already being done in marine and other forms. They appointed agents, who received commissions for the introduction of business. This innovation caused much comment and criticism at the time; the payment of the commission was often unknown to the client. Sometimes a man seeking life insurance would consult his solicitor, to whom he paid a consultation fee; it was unethical for the solicitor to receive also a commission from the company which he recommended. To this day the Equitable Society employs no agents and pays no commissions. Gradually the appointment of agents and the payment of commissions became the recognized practise. It tends to economy of supervision and rewards services according to results. Long experience has proved that people do not of themselves seek and purchase life insurance. Someone has to explain its nature, purpose and benefit before a man will rouse himself to make application.

Control of the agency systems in America is maintained under two different plans. The older of the two is the general agency system, under which a territory is allotted to a trained life insurance man, who is paid commission and allowances and who assumes responsibility for all business and outlays in his district. He selects and pays his subagents and solicitors, generally by commissions, sometimes granting drawing accounts against commissions to be earned. He also pays his own office force, collects premiums on a commission basis and so on. The other

plan is that of the managerial system, under which the district is controlled by a salaried employee appointed by the home office. The manager makes contracts on commission terms between the company and agents whom he may appoint. The central office of this manager's district is maintained by the company, usually with a cashier and clerical assistance. Responsibility for new business production within the territory rests with the manager; frequently his salary is determined by the volume in the preceding year.

One of the interesting differences between life insurance in Great Britain and in America lies in the varying agency systems. In America there is a great army of trained agents, salesmen or underwriters giving their entire time and energy to making contacts between applicants and companies. There exist college courses in salesmanship, and the degree of Chartered

Life Underwriter (C.L.U.) can be acquired. In Europe the agency system differs: there are many part time workers consisting of lawyers, bankers and merchants with no specialized knowledge, who write applications only for their clients and friends. The only salaried employees are the inspectors or supervisors, some of whom receive also a small overriding commission on the business of their district. There is no anti-rebate law in Great Britain; frequently a man who writes little more than the insurance on his own life is appointed an agent. The American system has been introduced into Great Britain by one or two Canadian companies; the outcome of the experiment will be of interest. The intensive drive for new business steadily conducted under the agency system has resulted in the leadership of the United States in volume of life insurance. Table III indicates that in recent years over 70 percent of the total life insurance

TABLE III
LIFE INSURANCE IN FORCE THROUGHOUT THE WORLD
(In \$1000)

COUNTRIES	AS OF DECEMBER 31, 1926	AS OF DECEMBER 31, 1928	AS OF DECEMBER 31, 1929
United States*	79,644,487	95,306,315	103,146,440
Canada	4,299,068	5,720,413	6,608,526
Brazil†	145,936	435,110	
Argentina†	62,317	94,699	105,591
Chile	26,170†	33,439	85,270
United Kingdom	10,896,977	11,481,582	11,705,129
Germany	1,950,390	3,283,625	3,722,694
Sweden	1,087,336	1,158,820	1,259,731
Netherlands	853,768	974,018	1,055,823
Italy**	601,978†	951,274	1,039,155
France**	522,051	926,242	1,118,099
Switzerland†	493,903†	571,284	614,457
Denmark	402,629	432,386	
Norway	299,780†	375,395	
Austria	223,804	370,011	506,160
Japan**	3,142,367	3,733,657	3,972,874
India	228,334	259,343	
Union of South Africa†	593,159	667,522	
Australia**	2,007,003	2,310,579	
New Zealand**	108,421	117,170	122,942
Other countries	5,410,122	6,797,116	
World Total	113,000,000	136,000,000	

* Excluding government war risk insurance.

† Amounts cover insurance in force on lives of residents of country in both domestic and foreign companies. For all other countries amounts cover insurance in domestic companies, including their foreign business.

‡ Estimated on the basis of amounts of other years.

** Including government insurance.

Source: Association of Life Insurance Presidents, *Proceedings of the Twenty-fourth Annual Convention* (1930) 39.

in the world was written by American companies.

The rate of interest earned is of great importance to the success of a life insurance company.

Additional interest earnings of 0.5 percent will make a difference of about 5 percent in the premium rate and more than 20 percent in the average dividend rate of a participating com-

pany. The average rates of interest earned by the life insurance companies operating in the state of New York over a period of years are as follows:

1880	5.6 percent
1890	5.1 percent
1900	4.5 percent
1905	4.4 percent
1910	4.6 percent
1915	4.8 percent
1920	4.8 percent
1925	5.1 percent
1930	5.0 percent
1931	4.9 percent

One of the most important functions of an

executive is therefore the supervision of the investments, and one of his main objects is to secure the highest interest return without endangering the principal. The trends of investments in the past fifty years can be seen from Table IV. Real estate holdings have diminished greatly. The growth of policy loans is a disturbing element, for such loans diminish the protective value of the insurance.

The payment of the proceeds of life insurance policies may be arranged under several modes of settlement. A cash payment is not always desirable, because the fund is so often dissipated through unwise investment on the part of a widow or other beneficiary lacking in business ability. Accordingly other plans are

TABLE IV

DISTRIBUTION OF ASSETS OF LIFE INSURANCE COMPANIES REPORTING TO NEW YORK STATE, 1880-1931

CLASSES	ASSETS IN 1931 (in \$1,000,000)	PERCENTAGE DISTRIBUTION OF CLASSES IN			
		1931	1926	1906	1880
Government bonds					
United States	395	2.1	4.1	0.1	9.0
State, county and municipal	728	3.9	2.9	3.6	
Canadian and foreign	477	2.6	2.5	3.1	
Stocks and bonds					
Railroad	2,986	16.2	20.2	34.8	21.0
Public utility	1,856	10.0	6.9	4.7	
Miscellaneous	611	3.3	1.5	3.7	
Real estate	519	2.8	1.8	5.4	12.0
Mortgages					
Farm	1,846	10.0	16.5	9.3	39.0
Urban	5,249	28.4	26.5	19.2	
Collateral loans	18	0.1	0.2	1.8	6.0
Loans to policyholders	2,943	15.9	12.0	8.9	5.0
Cash in offices and banks	145	0.8	0.8	2.3	5.0
Other assets, including outstanding premiums, accrued interest, etc.	727	3.9	4.1	3.1	3.0
Totals	18,500	100.0	100.0	100.0	100.0

Source: Figures for 1880, computations of author; figures for 1906-31, Association of Life Insurance Presidents, *Annual Report*, 1931 (1932) 83-84.

available. The policyholder may provide that the insurance be paid in fixed instalments for a period of years; or the proceeds may be left with the insurance company at interest and the principal sum paid at some fixed date in the future, in some cases after the death of the beneficiary. The interest rate varies and is determined from

year to year by the board of directors and has run from $4\frac{1}{2}$ to 5 percent with a guaranty of not less than 3 percent. The proceeds may be applied to purchase an annuity, whether for life, for a term of years or for a fixed term and life thereafter. If the insured has a definite plan in view he can instruct the insurance company to carry

it out. If he wishes to leave the proceeds to a trustee with discretionary powers he can best do this through an insurance trust. The great trust companies of the country have been actively recommending life insurance and especially this form of trust for their well to do clients. Life insurance companies will not generally accept discretionary powers in handling such funds; this is the function of a trust company.

Industrial life insurance has also shown a most unusual growth in modern times. Started in England in 1853, the principle was soon introduced into Germany, Austria, Switzerland, France, the United States and Japan; the first American company to write such policies was the Prudential in 1875. The chief appeal of this type of insurance is made to the urban working class population as a means of providing a fund for burial purposes. The average face value of industrial policies is now a little over \$200, having risen gradually to this figure from an average of \$110 in 1890. The chief characteristics of this form of insurance are the following. First, premiums are fixed for all ages at five cents and multiples per week, the adjustment for age being made in the amount of the insurance written. Second, premiums are payable weekly and are collected by agents who call at the homes. Third, the policies have no cash or other surrender values in the early years but usually acquire such values after they have been ten years in force. Fourth, the entire family down to the youngest infant can be insured. Under the New York law the maximum insurance in infancy is \$100 to the age of one, which increases \$100 with each year of age to \$1500 at the age of fourteen to fifteen. Fifth, the system of agency compensation is quite different from that of the ordinary branch, being a percentage collection fee, called the debit, based on the weekly collections plus x times the increase in the amount of such collections. The agent gets compensation for new premiums only as the total collections of his district increase. The volume of such business in force in the United States is shown in Table V.

The nature of industrial insurance, whereby premiums are collected from door to door and in small individual amounts, necessarily causes the expense rate to be high in relation to other forms of life insurance. In addition to this collection expense the small individual unit makes for additional cost; also holders of such policies are subject to a much higher rate of mortality.

Facilities are granted to industrial policyholders to pay their premiums voluntarily at branch offices and thereby obtain a 10 percent reduction in the premium; this method is fairly widely used. In the vast majority of cases, however, the system of collecting from door to door is followed. The lapse rate of industrial policies is noticeably higher than ordinary business because of the way in which such policies are written. A large number of the lapses take place shortly after the insurance is written; the companies are trying to devise means of avoiding this wastage, just as they try to reduce the collection expense. The industrial insurance agent is closely supervised and works long and exacting hours, for which he receives no more than a modest compensation.

TABLE V
INDUSTRIAL INSURANCE IN THE UNITED STATES,
1880-1931

YEAR	NUMBER OF POLICIES (in 1000)	INSURANCE IN FORCE (in \$1000)
1880	228	19,591
1890	3,875	428,037
1900	11,216	1,468,475
1910	23,044	3,179,490
1920	49,179	7,121,380
1930	89,183	18,274,969
1931	88,192	18,261,886

Source: Insurance Year: Life Insurance, for 1931-32, p. A-333.

Various states in the United States as well as some foreign countries have offered life insurance facilities. In general it may be stated that unless the plan is subsidized by the state and a regular selling organization maintained, such plans have been unsuccessful, and many of them have been discarded or allowed to become inactive. In two or three instances state insurance has achieved a fair degree of success. The outstanding case is that of New Zealand, which conducts a life insurance department in all respects similar to regular life insurance companies, having agents who are compensated by commissions. The life insurance department uses the facilities of the postal service, for which it pays for any insurance work done. New Zealand has avoided granting to its insurance department special favors which are not available to private carriers. The result is that mutual life insurance companies in the same territory are competing on favorable terms with the government agency. In Massachusetts by the end of 1931 each of twenty savings banks was insur-

ing residents of the state up to \$1000, making possible a total individual insurance of \$20,000. Some of the overhead expense has been borne by the state; individual propagandists and salaried employees have been furnished by interested parties, and taxation favors have been granted. In 1931 these twenty savings banks were carrying 101,000 policies to the amount of \$90,960,000. In Japan industrial insurance is a state monopoly which is run in conjunction with the postal department. Letter carriers act as collectors and a large volume of insurance has been written. Italy in 1912 decreed that life insurance in all branches be a state monopoly and has taken over the business of American and other foreign companies.

HENRY MOIR

See: INSURANCE; SOCIAL INSURANCE; GROUP INSURANCE; ANNUITIES; HEALTH INSURANCE; HEALTH EDUCATION; LIFE EXTENSION MOVEMENT; FRIENDLY SOCIETIES; FRATERNAL ORDERS; MUTUAL AID SOCIETIES; OLD AGE; MORTALITY; POPULATION; MARINE INSURANCE; WAR RISK INSURANCE; GOVERNMENT REGULATION OF INDUSTRY; COOPERATION TAXES.

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LILBURNE, JOHN (c. 1616-57), British political and social reformer. Leader of the Leveller party during the Interregnum, Lilburne's special distinction lay in his combination of progressive thought with vigorous action. He was the enemy of what he conceived to be oppression, whatever its aspect. Before the civil wars he took up the cudgels against episcopacy; during the wars he fought on Parliament's side but resigned his commission in 1645 after his refusal to take the covenant according to the New Model Ordinance. He came into conflict with both houses of Parliament because of his outspoken criticism of their political and religious policy. From 1645

onward he spent considerable time in prison, whence he issued a continuous stream of pamphlets, such as *England's Birth-right Justified against All Arbitrary Usurpation, Whether Regal or Parliamentary, or under What Vizard Soever* (London 1645) and *London's Liberty in Chains Discovered* (London 1646). Formulating under the pressure of his personal experiences the doctrines of extreme political democracy which had always been implicit in his outlook and temperament, he became during 1647 the leading spirit and one of the organizers of the Leveller party, the first English radicals (see LEVELLERS). He was a member of the committee set up to frame the Agreement of the People, in which was set forth a series of political reforms based on the inalienable rights of the individual. The publication of a pamphlet entitled *An Impeachment of High Treason against Oliver Cromwell and Henry Ireton* (London 1649) led to his trial on a charge of attempting to overthrow the government. He made a speech in his own defense and his acquittal was received with tremendous enthusiasm, a medal being struck to commemorate the event. He was banished in 1652 and returned only to be rearrested. His second trial in 1653 roused even more popular interest than the first. By his practise as much as by his theories Lilburne became the chief disseminator of radical doctrines in the Interregnum period.

M. JAMES

Other important works: *Jonah's Cry Out of the Whale's Belly* (London 1647); *A Defiance to Tyrants* (London 1648); *England's New Chains Discovered* (London 1648-49).

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LILIENBLUM, MOSES LEB (1843-1910), Zionist publicist and Hebrew writer. Lilienblum was born in Lithuania, which was then part of the Russian Empire, and his life is typical of the later period of the Jewish enlightenment, or *haskalah*, in Russia. He began in the liberal days of Alexander II with a fight against the dominance of the Talmud, pleading for a reform of the rabbinic laws in the spirit of the new age. Persecuted by the orthodox Jews, he moved to Odessa and soon came to see the shortcomings of the *haskalah* in undermining the old folk vir-

tues without producing positive values in their stead. His disillusionment was depicted with bitter outspokenness in his autobiography, *Chattoth neurim* (The sins of youth, 2 vols., Vienna 1876), his best piece of writing. Influenced by the positivist utilitarian and socialist doctrines of Chernyshevsky and Pisarev, he attacked the Jewish educational ideas of both the rabbis and the modern *haskalah* as equally remote from life; instead of furthering useful studies and productive occupations they breed idleness and poverty. He declared that national distinctions are but accidental and conventional and that in the future all peoples will be merged into a tribeless humanity. From these cosmopolitan dreams he was shaken in 1881, when with the accession of Alexander III a period of reaction set in and a wave of pogroms swept over Russia. The effect of those days he described in *Derech teshuvah* (Road of return, Warsaw 1899). Like a sudden illumination the thought came to him that the Jews are aliens everywhere and that their only salvation lies in being domiciled once again upon their ancestral soil. His positivist philosophy also contributed to his conversion to Zionism, and he threw himself wholeheartedly into the *Hovevei Zion* (Lovers of Zion) movement. Opposing the spiritual Zionism of Ahad Ha'am he demanded a practical attitude in the colonization of Palestine: Palestine should be restored not for the sake of Hebrew culture but in order to lift the Jewish people out of its political degradation. This seemed possible to him even without political independence, for what mattered was not government but "historic citizenship" upon the soil of a homeland.

SHALOM SPIEGEL

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LILIENFELD-TOAILLES, PAVEL FEDOROVICH (Paul von Lilienfeld) (1829-1903), Russian sociologist. Lilienfeld, the most extreme representative of nineteenth century sociological organicism, was the descendant of a noble Swedish family which had settled in Livonia. He was born in Bialystock. After studying at St. Petersburg he held important Russian judicial posts and was for seventeen years gov-

ernor of Kurland. As an avocation he engaged in much sociological writing, chiefly in German, although his first important works and the first version of his magnum opus, usually known as *Gedanken über die Socialwissenschaft der Zukunft*, were written in Russian and he wrote also in French. As president of the Institut International de Sociologie from 1897 to 1898 he officiated at the third International Sociological Congress.

In comparison with Lilienfeld, whose work is based on the assumption that human society is a "real organism," Spencer and Schäffle, the other prominent organicists, were very cautious indeed. Lilienfeld's work collapses completely if the assumption of organismic homology which he used is destroyed. He was quite aware of the extreme nature of his organicism and of the differences between himself and other writers.

His later works were little more than variations on the organismic motif set by the *Gedanken*, and he regarded his doctrine that society is a real organism as his great contribution to sociology. His writings are filled with the terminology of scientific biology; material culture, for example, is "social intercellular substance." Although Lilienfeld possessed considerable erudition (his writings abound with references to Darwin, Tylor, Waitz and others not usually cited as early as the 1870's), his intellectual gifts were not of the highest order. Much of his work is mere journalistic prattle. His importance was negative; for sociologists of the late nineteenth century he was a horrible example of the consequence of taking seriously his own dictum, *Sociologus nemo nisi biologus*.

HOWARD BECKER

Important works: Under pseudonym Lileyewa, *Osnovniya nachala politicheskoi ekonomii* (Fundamental principles of political economy) (St. Petersburg 1860); under initials P. L., *Misli o sotsial'noi nauke Budushchago* (St. Petersburg 1872), enlarged German ed. as *Gedanken über die Socialwissenschaft der Zukunft*, 5 vols. (Mitau 1873-81); under name Paul de Lilienfeld, *La pathologie sociale* (Paris 1896); *Zur Vertheidigung der organischen Methode in der Sociologie* (Berlin 1898).

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LIMITATION OF ACTIONS, in Anglo-American law, denotes the requirement that judicial relief be sought within a fixed period after the occasion for it arises. The term prescription has been variously used in this connection in different legal systems. In the modern civil law, which makes the most elaborate distinctions, if a claim to property is not asserted judicially within a fixed period, the claimant's rights are extinguished (negative or extinctive prescription) and his adversary's claim confirmed (positive or acquisitive prescription). There has been much discussion as to whether the limitation requirement is remedial or substantive. As governing the commencement of actions it now appears to be remedial, and provisions relating to it are usually found in the American codes of civil procedure; but as a mode of acquiring ownership it seems to be a rule of property and as such is incorporated into most Romanesque civil codes. Modern legislation dealing with limitation of actions in reference to property has for its object the security of titles, which would be jeopardized if ownership could be questioned at any time without limitation. The general rationale of these rules has been interpreted as proceeding either from grounds of public policy or from a presumption that legal title had been acquired in the elapsed time, since no suit had been brought sooner. In its reference to personal rights and to crimes the theory is much the same as that of bankruptcy laws—the debtor should not be pursued forever. In most legal systems the limitation concept is now expressed in statutory form, and in English law it must be so expressed; but such was not always the case.

It has been said that primitive peoples have no statute of limitations, but only in the barest literal sense is this true. The underlying concept appears in early society. There is little doubt that the limitation concept arose while law was still customary and while self-redress was still tolerated, for it constituted a restriction upon the latter. The lingering tradition of self-redress may indeed have operated to delay the embodiment of limitations in the written law.

Limitation is older as a substantive rule of property than as a remedial rule. In fact the limitation seems connected with the origin of private property. Primitive ownership appears to have resulted from contact with an object, which thus became a part of one's personality. If there was no other claimant, the object became at once the property of the one making

the contact. (In Roman law this concept developed into that mode of acquisition called *occupatio*, which feudal law rejected.) If, however, another claimed the object he must assert his claim with reasonable promptness or suffer its forfeiture. It was as *usucapio* (taking by use) that the concept was first fully worked out. According to Loria the Roman *usucapio* was intended to reward economic initiative by penalizing landlord absenteeism. In Sohm's view, *usucapio* in classical Roman law performed a twofold function: it transformed bonitary (equitable) ownership into quiritary (legal); and it protected the title of an individual who had acquired a thing *bona fide* from a non-owner. Both Gaius and Justinian speak in their Institutes of the rule as designed to prevent an overlong uncertainty regarding ownership. Long before either Demosthenes had stressed the unreasonableness of requiring a possessor to preserve his evidence forever. *Usucapio* was a rule of Roman law earlier even than the Twelve Tables. That collection provided for acquiring ownership by possession of two years for immovables or one for other property. The principle was still recognized as late as the time of Constantine, who, however, lengthened the periods to forty years.

Caesar and Tacitus note that the Germans were wont to change each year the allotments of their lands; this system together with their nomadic life gave little chance for a custom like *usucapio* to grow up among them. It was not until about the ninth century that it began to develop and it appeared then in the form of the *Verschweigung*, a custom eventually enforced by a judicial peace ban which required all who impugned any existing condition to do so within a fixed period, usually "a year and a day," but lengthened later. Among the Franks this took the form of the "citation seisin," by which a claimant to land was judicially called upon to assert his claim within the prescribed period or suffer "acquiescent preclusion." Ultimately the system spread over most of western Europe. It prevailed in France for centuries, and in mediaeval Germany as *Auflassung* it is said to have been the exclusive "mode of assurance." All this, however, was restricted to land. The general doctrine of *usucapio* was not adopted in Germany until the reception of Roman law. The present German Civil Code recognizes *usucapio* as to movables, but as to immovables only for curing defective entries in the registry.

Anglo-Saxon law like the other Germanic

systems did not include the concept of *usucapio*. Not even the "fine and recovery," or fictitious compromise, followed by seisin, appears before the Conquest. But William the Conqueror early in his reign decreed that open possession for "a year and a day" was a sufficient defense to another's claim against the finder of an object. Under the Nottingham charter from Henry II if a serf or other person "dwell in the borough a year and a day in time of peace, no one except the king shall have any right in him." The same period afforded the "preclusive bar" fixed by the fine and recovery, and Maitland concludes that this was "originally the only possession that could become ownership by the lapse of a year and a day." In Bracton's time the period seems to have been shortened. Bracton wrote of *usucaptio* (sic) and considered *longa possessio* sufficient for ownership. He applied the principle especially to incorporeal rights, like those of common, which had been protected by a plea of seisin since before the Conquest. The traditional view in England has been that extinctive prescription does not extend beyond incorporeal property, but it so extends under certain American statutes.

From a custom based on a natural presumption or designed to protect property rights it was a short step to one which required the timely assertion of other claims. In the Hebrew "book of the law" (seventh century B.C.), later incorporated into *Deuteronomy*, creditors are required to release their debtors at the end of every seventh year (xv: 1, 2). Demosthenes praises the principle in Attic law and attributes it to Solon. By the Twelve Tables not only tangible property but marital rights may be acquired by *usucapio*; and a claim against an alien is declared perpetual—i.e. he can never invoke a limitation—thus implying that there were limitations in claims against Romans. But, according to Hunter, Roman prescription as applied to rights in personam began when the praetor, introducing new actions, limited them to a fixed period, generally a year. If the action was of legislative origin it could be brought at any time, but the non-transmissibility of certain actions, not alone delictual ones but also certain contractual ones (e.g. those founded on a stipulation), afforded a species of limitation: a proceeding to enforce them had to be brought within the lifetime of one or both parties. As to delictual actions the same principle operated in English law down to the passage of Lord Campbell's Act in 1846, which allowed an action by the near relatives

of the deceased in the case of wrongful death. This act was generally followed in the United States. A rescript of Honorius and Theodosius in 424 fixed a limitation of thirty years for personal actions (those to enforce obligations) as well as those in rem; but for some actions a longer period was stipulated later.

In English law there appears to have been no procedural limitation until after the Conquest. In the following century there was a limitation for the writ of right, which could not go back to the end of the reign of Henry I (1135). The Assize of Novel Disseisin was limited in Glanville to the king's last passage to Normandy. Bracton appears to make *usucapio* applicable to all actions; but legislation on the subject proceeded: by the Statute of Merton [20 Hen. III, c. 8 (1235)] the limitation for a writ of right was brought down to the beginning of the reign of Henry II (1154); by that of Westminster I [3 Edw. I, c. 39 (1275)] it was further extended to the beginning of the reign of Richard I (1189), where it long remained. The act of 32 Hen. VIII [c. 2 (1540)] was framed on the Roman principle of fixing a period—thirty years of the defendant's own seisin or sixty of his ancestor's—to support a writ of right and fifty years for a possessory action and certain others. The statute of 21 Jac. I [c. 16 (1623–24)] limited writs of formedon and, in effect, ejectment as well as personal actions. This was the first general English statute of limitations and it was extended to the colonies, including those of America. Meanwhile Chancery, through its doctrine of laches, applied the principle “from the beginning of this jurisdiction . . . without the help of an act of parliament.”

Before the time of Gaius the *praescriptio*, which was a note prefixed to the praetor's *formula* directing the trier of fact to dispose first of some preliminary question, was available to the defendant to raise various defenses. In the third century the defense of lapse of time (*praescriptio longi temporis*) was admissible, and eventually the term *praescriptio* came by metonymy to signify the limitation itself. Under Justinian *usucapio* and *praescriptio* were assimilated in usage (although strictly the former applied to movables alone), and the joint concept prevailed throughout the empire. *Praescriptio longi temporis* represented a limitation of from ten to twenty years for immovables, and *praescriptio longissimi temporis* thirty or forty years; the two periods later became known respectively as ordinary and extraordinary prescription.

The canonists appear to have taken over the

Justinian law of prescription in so far as it was needed for their purposes but to have stressed the element of *bona fides* and the effect in *foro conscientiae*. Using the extraordinary prescription concept and certain references in the Digest to prescription whose origin extends beyond memory, the canonists devised what became known as immemorial prescription, dispensing with a specific period. Thus they raised a conclusive presumption of ownership and afforded a supplementary method of acquisition available when no shorter period was stipulated. This device played a large part in the development of feudal law.

The doctrine of immemorial prescription developed as a customary institution in French law. There extinctive prescription of thirty years was transformed by custom into *usucapio* and given precedence over ten or twenty years' prescription, the conditions of which were rather difficult to meet. By the sixteenth century the Justinianian concept of prescription appears in the *coutumes*. That of Paris, compiled by 1510 but existing in written form far earlier, embodied the concept with all its requisites except prescriptibility. The provisions of the *Code civil* are little more than an amplification of those of the *coutume*.

Before the end of the mediaeval period English law like the French and the feudal (from both of which it drew) took over immemorial prescription and its resulting presumption that a grant had been made before the time of legal memory. This had a profound influence upon rules of pleading and proof. Where such a prescriptive title was alleged, no inconsistent one could be pleaded without traversing (denying) the first. Later the claimant to such a title might plead a grant which had been lost and support it by proof of twenty years' user. This culminated in the doctrine that such proof raised the presumption of a grant; hence the courts often spoke of the statute of limitations as a statute of presumptions. But the later tendency of English thought is to regard this as a fiction which has outlived any usefulness it may have had. The courts now apply the statute on grounds of public policy rather than by reason of any presumption that the claim is unfounded. An exception exists in acts embodying the Torrens or similar systems of registering land titles, which usually provide or are construed to mean that ownership of the registered land may not be acquired by prescription; although under certain British decisions that mode of acquisition must

be expressly excepted. As regards other rights than those of property limitation and prescription usually coincide, and even in questions of limitation a claimant who loses his remedy virtually loses his right. In the words of Pollock and Maitland "every acquisition of seisin, however unjustifiable, at once begets title of a sort, title good against those who have no older seisin to rely upon."

Limitation of action in reference to crimes also has its origins in very early practise. The notion that offenders must be punished, if at all, within a reasonable time after committing their misdeeds, appears intimately connected with various provisions for the restriction of self-redress. Among the earliest of these is the severer punishment permitted when the offender is caught red handed. According to the Twelve Tables a thief caught under such circumstances could be slain or scourged and turned over to his victim; otherwise the owner was limited to an action for damages. Traces of the same notion are seen in the rule of "hot pursuit," during which the accused may be visited with the most extreme penalty, and in the Lombard restriction of private vengeance to one year, after which the king must fix the punishment. Under Justinian *crimina publica* had to be brought within twenty years, with exceptions for apostasy, for parricide and for substitution of offspring, and with shorter periods for specific offenses. Canon law looked with disfavor upon immunity not resulting from ecclesiastical absolution; it emphasized the element of moral guilt. The Roman notions reappeared in mediaeval Italian law, but the French *Code d'instruction criminelle* was the pioneer in reviving the full Roman idea. It provided a prescriptive period of ten years for the prosecution and twenty for the penalty, in case its execution was delayed after sentence. Other codes of criminal procedure and penal codes have adopted similar provisions. There is no general limitation of prosecutions or penalties in English law, although for special offenses, such as treason, embezzlement, larceny and smuggling, an indictment must be found within a specified time. Most of the states of the United States as well as the federal government have statutes providing limitations for virtually all offenses, with the general exception of murder. As a whole modern legislation proceeds on the theory that the interests of society are best served by requiring criminal prosecutions to be brought within a reasonable time or not at all; and that nothing substantial is gained by keeping

an accused person or a suspect in long suspense.

Probably no limitation has operated uniformly as to all persons. In the Twelve Tables the mancipable property of a woman under tutelage was not subject to *usucapio* unless it had been delivered with her tutor's authorization. At a later time all those under tutelage were during its continuance exempt from *usucapio*. In the modern law the statute does not run against minors or the *non compos mentis* or in favor of those absent from the jurisdiction. Bracton for the first time in English law announced the broad rule *nullum tempus occurrit regi*, which still applies to all claims of the crown save statutory exceptions regarding realty. In republican countries the government and sometimes "the public" is substituted for the crown. The exemption is not available, however, without express enactment, to subdivisions of the state, such as municipal corporations.

For *usucapio* and prescription in the original sense, property, naturally tangible, was the sole subject matter. But the Twelve Tables recognized marital rights resulting from *usucapio*, and something of the sort existed in the early English law. Under Justinian a slave enjoying liberty in good faith for twenty years became free; a similar practise prevailed in the English and later Lombard systems. Under the *Forum judicum* fugitive slaves, even if belonging to the crown, could not be returned to servitude after fifty years. But Charlemagne denied the benefits of prescription to a fugitive slave and the inhibition extended to others through Germanic and feudal law. *Usucapio* of movables was recognized in the Twelve Tables but was not incorporated in the older Germanic law. In France the later Roman *usucapio* of three years did not become applicable because the reclaiming of movables was never permitted. After the fourteenth century a thirty-year prescription came to be established for movables.

From a very early period certain property has been treated as imprescriptible. Under the Twelve Tables stolen property was imprescriptible and also tombs, the latter affording later the nucleus of imprescriptible *res sacrae et religiosae*. A slave could not be acquired by prescription in early English and later Lombard law. The provision in the Twelve Tables which exempted from *usucapio* the five-foot space between neighboring fields was the forerunner of a rule which applied not only to highways but to public property in general. According to Gaius *usucapio* was not applicable to provincial soil

("since it belongs either to the Roman people or the emperor") or to a city's walls and gates. Justinian's Institutes makes imprescriptible the *fiscus* except when left by an heirless decedent. Taxes were never prescribed. Under modern law both civil and English public property is imprescriptible, but not the state's patrimonial property.

To acquire rights by prescription one must have possession, which in a legal sense includes physical control. By both civil and common law possession is either natural (actual) or civil (constructive) and the latter suffices prescriptively in each system. By both also the possession must be open and notorious. A clandestine possession confers no rights on the possessor because it affords no warning to the owner. The Twelve Tables imply, if they do not expressly state, the rule that *usucapio* requires continuous and uninterrupted possession for the prescribed period, for it is held that the wife's absence during three nights of the year prevents the acquisition of marital rights by *usus*. Justinian restates the rule and it reappears in both of the principal modern systems. This does not mean, however, that the same individual must continue in possession. Early Roman imperial legislation enabled an individual to claim the benefit of his grantor's possession, while Justinian gave the same effect to that of any predecessor. Such is the basis of the doctrine of "tacking," now generally prevalent. The Roman *Lex julia et plautia* forbade *usucapio* of property acquired by violence, and the doctrine was developed by the praetor; Justinian even made forcible recovery of one's own property a ground for losing it. English law goes less far but does require peaceable possession. Finally, possession must be adverse and exclusive, although if acquired by an agent or tenant it accrues to the principal's benefit. In the Roman law and its offshoots the possession usually must begin in good faith; that is, the possessor must believe himself the owner. The rule in the Twelve Tables forbidding *usucapio* of stolen goods was extended even to an innocent purchaser; but where the original possessor acted in good faith, a successor's knowledge that the property was another's did not affect the former's claim. Under the *Partidas*, *bona fides* was not required at all in case of thirty years' possession. The canon law deemed *bona fides* more important and insisted upon its continuance throughout. English law, on the other hand, does not require that the beginning of the user should be *bona fide*.

Under the law of Justinian the possessor for

ordinary prescription must have *justus titulus*—he must have acquired by one of the recognized modes of transferring ownership; if the transfer was in some way defective, possession with the other requisites might cure it. In the modern civil law the required "just and proper title" usually means a document purporting to transfer ownership. There is no such requirement in Anglo-American law. But the later Roman law likewise recognized extraordinary prescription by which in a longer period ownership could be acquired without any of the recognized modes of transfer. This also appears in the modern civil law.

The duration of the period of limitation varies greatly. In the Twelve Tables the longest period required was two years (and that for immovables only), which was reduced to one for a decedent's land not yet occupied by the heir. The praetor in a dispute over a movable granted an interdict to the possessor for the greater part of the preceding year, and a year was the first period of limitation which the praetor introduced. Constantine prescribed forty years for acquiring ownership; Justinian required three years for movables and ten for immovables or twenty if the parties were absent. Extraordinary prescription required thirty and sometimes forty years. The *Forum judicum* adopted the period of thirty years as to actions but required fifty for ownership; while the *Partidas* in taking over the limitations of Justinian has been followed generally by the modern civil law codes. The earliest English statute of limitations fixed thirty and fifty years for actions involving realty. In the statute of 21 Jac. 1 the period was twenty years for real property actions, six for contractual and four for tortious, except for slander, which was two. The shorter period for the latter two indicates a purpose to discourage litigation upon such grounds and to permit it only while the grievance is fresh. American state legislation, which generally follows the statute of 21 Jac. 1, is restricted by constitutional provisions and must always provide a reasonable time for utilizing the remedy.

In civil matters the period begins to run when the party entitled to relief could have instituted his action; a legislative attempt to start it earlier was declared inoperative (*Webster v. Cooper*, 55 U. S. 14 How. 488). If the right is conditional the condition must have occurred, and where a demand is necessary the period runs therefrom. In penal matters under the continental system the period for prosecutions begins to run from the commission of the offense or from the last of several successive acts constituting it.

This is also the American rule. For penalties the period runs from the date of conviction.

In regard to the interruption of the prescriptive process there has been great variation in practise. Justinian fixed a longer period of limitation where one of the parties was absent from the province, and the principle is retained in the modern civil law. Formerly in England the right of action accrued so as to start the running of the statute only so as to one "within the realm" and "out of prison"; but these exceptions have been repealed. Absence of the defendant from the jurisdiction will generally suspend the statute as to him. Under Justinian prescription did not run against those below the age of puberty. English law subjected to the running of the statute only those "of full age, of sound mind . . . and, if a woman, unmarried." American legislation generally makes absence of either of the first two a ground for suspending statute. In the Roman law the period was interrupted by an acknowledgment of liability on the part of one claiming the limitations benefit. In modern English law there must be a promise to pay the debt, either unconditional or accompanied by a showing of performance of the condition, or an acknowledgment from which a promise may be implied. The institution of proceedings by the claimant constituted what was known in Roman law as a civil interruption, and the concept has been retained in the two modern western systems.

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See: PROCEDURE, LEGAL; CRIMINAL LAW; TORTS; CONTRACT; LAND TRANSFER.

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LIMITATION OF ARMAMENTS. The importance of the limitation of armaments in furthering the cause of international peace has long been recognized. A nation in a state of industrial and military preparedness is much more willing to employ the processes of international adjudication in settling a dispute than a nation that has built up a powerful military machine eager to secure the initial advantage of striking the first blow. So long as the reduction of armaments does not take place, no machinery for the pacific settlement of disputes can be effective. Moreover the reduction of armaments would involve saving of enormous sums—sums which might well be used for more productive purposes.

Despite the economic burden of maintaining large military establishments no great power has been willing to run the risk of unilateral disarmament. The attitude of such a power toward disarmament whether unilaterally or by treaty is affected by the internal presence of munitions industries and military establishments. In the past at least some governments have desired to expand their navies as one means of increasing their foreign trade.

Theoretically, however, governments since the World War have expressed a willingness to reduce armaments by treaty provided the reduction would leave the relative security of each power unimpaired. Any limitation treaty removes or at least limits competition and uncertainty concerning armament levels and hence should add to the security of each power. Once achieved, the limitation of armaments even at a high level introduces a stabilizing factor into world politics and paves the way for genuine reduction in the future.

As early as the conclusion of the Seven Years' War and the Congress of Vienna attempts were made to secure limitation of armaments by treaty. The attempts failed, as did the efforts of the French government in 1831 and 1863. The initiative was taken next by the czar Alexander, who in his famous invitation to the First Hague Conference of 1899 stressed the oppressive burden of armaments and proposed that an agreement should be made providing for the "non-augmentation" of the armies, navies and war

budgets of the respective powers for a term of years to be agreed upon. This proposal was too advanced, however, and the Hague conference could do no more than pass a resolution stating that the "restriction of military charges, which are at present a heavy burden on the world, is extremely desirable for the increase of the material and moral welfare of mankind." The conference also passed a *vœu* that the governments examine the "possibility of an agreement" limiting armaments and budgets in the future. The Hague Conference of 1907 in addition to reaffirming the earlier resolution declared that "inasmuch as military expenditure has considerably increased in almost every country . . . it is eminently desirable that the Governments should resume the serious examination of this question." The rivalry between the Entente and the Triple Alliance, which led to the World War, prevented any such examination.

The experience of the World War led to renewed attempts to place some limitations on armaments. The Treaty of Versailles imposed drastic disarmament upon the defeated powers; it also declared (art. 8) "that the maintenance of peace requires the reduction of national armaments to the lowest point consistent with national safety and the enforcement by common action of international obligations" and entrusted to the Council of the League of Nations the task of drawing up plans of reduction, which should be subject to reconsideration at least every ten years. Members of the League also undertook to interchange full and frank information as to the scale of their armaments and military programs.

The first concrete steps toward realizing a general arms limitation were taken, however, not by the League but at the conference convened by the United States in Washington on November 12, 1921, which considered also important political questions dealing with the Orient. At the beginning of the sessions the American delegation proposed a drastic reduction in navies with regard for existing naval strengths. On February 6, 1922, the British Empire, the United States, France, Japan and Italy—the five naval powers invited to the conference—signed a Treaty for the Limitation of Naval Armaments which was duly ratified and entered into effect on August 21, 1923. The effect of this agreement was roughly to establish parity in capital ships between the British Empire and the United States, with corresponding ratios of strength for the other powers.

The Washington treaty provided that between 1923 and 1931, when replacements might begin, the status of the battleships of the five powers should be as follows:

	CAPITAL SHIPS	TONS
British Empire	20	558,950
United States	18	525,850
Japan	10	301,320
France	10	221,170
Italy	10	182,800

The British Empire was allowed a somewhat larger tonnage and number in capital ships than the United States because a majority of its ships were of an older type, while the American vessels were superior in gun power. The acceptance of these figures meant a reduction by the British Empire, the United States and Japan of about 40 percent of their capital ship strength, built and building. Altogether seventy ships, built and building, were scrapped, the United States surrendering the most, thirty vessels of 820,540 tons. Neither France nor Italy was asked to scrap any existing tonnage because of the relatively small strength of their capital ships.

It was further agreed that replacements might begin in 1931 and proceed so that by 1942 the capital ships of the five naval powers would be as follows:

	CAPITAL SHIPS	TONNAGE	RATIO
United States	15	525,000	5
British Empire	15	525,000	5
Japan	9	315,000	3
France	5	175,000	1.67
Italy	5	175,000	1.67

The size of each new ship was limited to 35,000 tons and its guns to sixteen-inch caliber. The treaty also limited total tonnage in aircraft carriers to 135,000 each for the United States and the British Empire, 81,000 tons for Japan and 60,000 tons each for France and Italy. Finally, it was provided that in 1931 the United States might arrange for a conference to consider desirable changes in the treaty to meet possible "scientific and technical developments." The Washington treaty was to remain in force until December 31, 1936; and in case none of the contracting powers should have given notice two years before that date of its intention to terminate the treaty, it was to continue in force until the expiration of two years from the date on which a notice of termination was given. Within one year of the date on which a notice of termina-

tion should take effect, all the contracting powers would meet in conference.

Although the Washington conference thus limited the number of capital ships and aircraft carriers it failed to limit the number of the lighter and faster auxiliaries, such as cruisers, destroyers and submarines, which some naval experts now consider more useful than battleships. Others hold the battleship to be an obsolete arm, expensive beyond its worth, useful only for fighting other battleships and the easy prey of the submarine and the airplane. Originally the United States proposed a limitation in cruisers and destroyers substantially on the same ratios as adopted for capital ships. The French delegation, however, declared that it could not accept the subordinate position in regard to light cruisers, destroyers and submarines which it had accepted in capital ships, on the ground that these cheap and effective arms are peculiarly the weapons of the smaller naval powers. France demanded a minimum of 90,000 tons of submarines, which equaled the combined submarine tonnage for Great Britain and the United States. In view of its peculiar susceptibility to submarine attack the British government declined to sign any treaty authorizing this large submarine tonnage for France or to consider any limitation on auxiliary vessels capable of dealing with submarines.

Nevertheless, the conference concluded a treaty (which France did not ratify) recognizing "the practical impossibility of using submarines as commerce destroyers without violating . . . the requirements universally accepted by civilized nations for the protection of neutrals and non-combatants." Any person violating the principle of international law that merchant vessels cannot be seized without warning or sunk without providing for the safety of passengers and crews was made liable to punishment "as if for an act of piracy."

Following the Washington conference a new naval competition arose among the great powers in the building of non-treaty vessels, particularly the 10,000-ton cruiser carrying eight-inch guns. By the beginning of 1927 the British government had actually laid down thirteen of these large cruisers, while Japan had built four, France three and Italy and the United States each two. The British had taken the lead in this construction in an attempt to regain their pre-war cruiser strength, which had been reduced from 114 in 1914 to fifty-six in 1921.

Meanwhile in September, 1925, the Council

of the League of Nations had established a Preparatory Commission for a Disarmament Conference. During sessions of the commission in 1926 and 1927 a basic difference arose between the Anglo-American group, which believed that naval limitation could be arrived at independently of land limitation and that naval limitation should be made by categories, and a group headed by France, which contended that land and naval armament were interdependent and that as far as naval disarmament was concerned the principle of global tonnage should be followed, each state remaining free within the general limitation to allocate tonnage between different types of vessels as it chose. France, not wishing to build capital ships because of their heavy cost, preferred to concentrate tonnage in light cruisers and submarines. The Anglo-American powers opposed global limitation on the ground that it would lead to a continuance of competition within the general tonnage figures. When agreement appeared impossible, President Coolidge took the initiative in calling a conference at Geneva to achieve the limitation of naval auxiliaries. His invitation was accepted only by Great Britain and Japan.

The Geneva naval conference convened in June, 1927. After an acrimonious debate it broke up on August 4 without having arrived at any agreement. The reasons for failure were the insistence of the British government upon the right to maintain seventy cruisers, a figure which the United States did not wish to have to equal in order to achieve parity, and the insistence of the United States upon retaining freedom to maintain large cruisers with eight-inch guns, which American naval men considered necessary because the United States' lack of naval bases compels long cruises without refueling or supplying. The British with bases scattered about the world prefer to concentrate on larger numbers of lighter vessels. The failure of the Geneva conference inevitably exacerbated feeling between Great Britain and the United States, and efforts to find a formula in the famous Anglo-French compromise of July, 1928, to which the United States was not a party, made matters worse.

With the advent of President Hoover to office the United States made another effort to secure naval limitation through the League Preparatory Commission. In a series of conversations in October, 1929, between President Hoover and Prime Minister MacDonald of Great Britain a basis was laid for an agreement upon the cruiser

question: the principle of parity was accepted by both governments and agreement was reached as to a method of defining parity.

The London Naval Conference, attended by the United States, Great Britain, France, Italy and Japan, was convened in London on January 21, 1930. After three months' negotiation a naval treaty was signed which not only amended certain provisions of the Washington treaty of 1922 but also provided for the limitation of all auxiliary craft belonging to the United States, Great Britain and Japan. So far as battleships are concerned, the three latter powers agreed to postpone the date for the laying down of new battleships from 1931 to 1936, thus creating a five-year holiday. They agreed also to scrap or otherwise dispose of a total of nine battleships within thirty months. Finally, the three powers agreed to limit tonnage for cruisers, destroyers and submarines as follows:

	UNITED STATES	GREAT BRITAIN	JAPAN
	(In thousands of tons)		
CRUISERS*			
a	180.0	146.8	108.4
b	143.5	192.2	100.5
Destroyers	150.0	150.0	105.5
Submarines	52.7	52.7	52.7
Total	526.2	541.7	367.1

* "a" includes cruisers with guns of more than 6.1 inch caliber. "b" includes cruisers with guns of 6.1 inch caliber or less.

This formula was designed to give parity in auxiliary vessels between Great Britain and the United States. For although slightly larger tonnage is allotted to Great Britain than to the United States, the latter government is authorized to maintain a superior number of large cruisers.

The London naval treaty was unable to impose any restrictions upon the size of the auxiliary fleets of France and Italy because of Italy's demand for parity with France and France's refusal to accept it. The possibility therefore remained that France and Italy as a result of competition would expand their fleets so as to menace particularly in the Mediterranean Sea the position of the British navy, now limited by the London treaty. To protect against such an eventuality the treaty contains a safeguarding clause under which each of the three signatories is given the right to exceed the tonnage levels established for cruisers, destroyers and submarines if in its opinion new construction

by non-treaty powers affects the requirements of its national security. In case one party invokes this clause the other two parties are free to make a proportionate increase in their own tonnage. Independent Franco-Italian conversations after the conference were equally ineffective by May, 1932, in securing an agreement between these two countries.

As a result of the Washington and London conferences the capital ships and aircraft carriers of the five leading powers are limited by treaty, while every category of war vessel in the three leading navies of the world is limited. This is something of an achievement. On the other hand, the cruisers, destroyers and submarines in the French and Italian navies remain unlimited and the levels at which the navies of the three leading powers are fixed are unduly high. To build the navy authorized in the London treaty the United States would have to expend nearly a billion dollars over five years. Finally, competition still remains possible even in the case of vessels limited by treaty. This fact was vividly demonstrated with the launching of the *Deutschland* by the German government in May, 1931. This so-called "pocket battleship," having a displacement of 10,000 tons, a speed of twenty-six knots and a cruising radius of 10,000 miles and carrying eleven-inch guns, meets all the technical requirements of the limitations imposed by the Treaty of Versailles; nevertheless, it is considered by some experts to be as powerful as many battleships of much greater tonnage. Apparently the only means of preventing the development of such new vessels is by meticulous definition of the specifications of the types limited.

Within the two other major branches of armaments—land and air—no limitation agreements have yet been concluded. Nevertheless, as a result of the six sessions of the League Preparatory Commission for the Disarmament Conference between May, 1926, and December, 1930, a draft agreement covering all types of armaments was concluded and placed before the conference called by the League Council for February, 1932. This provided a skeleton agreement but did not contain the figures at which armaments should be limited. The draft treaty provided for the limitation of (1) personnel in military, naval and air forces; (2) airplanes by number and horse power; and (3) total annual expenditure on land, naval and air forces. The supervision of the treaty was to be entrusted to a Permanent Disarmament Commission. The draft treaty con-

tained no provision for the limitation of land material, such as types of machine guns and rifles, nor did it attempt to fix the respective military strengths of each power. Moreover this treaty also excluded from limitation so-called trained reserves.

The problem of limiting land armaments is for a variety of reasons far more intricate than that of limiting navies. There are only a few types of naval vessels and these types are common to all naval powers. In the case of armies, however, two conflicting systems of recruiting are followed: the conscription system and the professional army system. The majority of the countries of the world employ the conscription system, under which all young men reaching a certain age are obliged to perform a period of military service. Upon the completion of this period of active training they return to civilian life but form part of a trained reserve liable to be called to the colors in case of any emergency. Other countries, notably England and the United States, follow the professional system, in which armies are voluntarily recruited for comparatively long periods of time. While this system may produce a highly efficient and mobile professional force it does not build up any trained reserves. In 1914 England could mobilize only 733,500 trained men in comparison with 3,580,000 mobilized by France under the trained reserve system. Germany in the same year was able to increase its army from the peacetime strength of 761,000 to a war strength of 5,000,000. The peace treaties required Germany and its former allies to abandon conscription in favor of the system of professional armies. Europe today therefore employs two different military systems; and for the purpose of a limitation agreement it is extremely difficult if not impossible to find a common denominator by which they may be compared. A limit on the number of men under arms at any given moment as established by the draft treaty means very little while trained reserves are excluded from limitation, unless the annual contingent of recruits is put under control.

As was demonstrated by the phenomenal development of machine guns and tanks during the World War, warfare is becoming rapidly mechanized; and an effective limitation agreement cannot therefore ignore the problem of material. Recognition of its importance led to the inclusion in the Treaty of Versailles of clauses prohibiting Germany from using large guns, tanks, military aircraft and submarines.

The obstacles confronting the limitation of material are formidable. The first is created by the problem of trained reserves. Nations following the conscription system cannot accept the same limitation upon material as nations maintaining professional armies, without automatically disarming their trained reserves. Secondly, no limitation of material can be effective if during times of peace governments are allowed to organize industrial establishments capable of turning out armaments and munitions in enormous quantities once war breaks out. If in one of two states which have agreed to maintain an equal number of tanks private enterprise manufactures as many tanks as it likes, the official tank limitation becomes illusory. A League of Nations committee has studied the question of limiting the private manufacture of arms; but so far no convention on the subject has been drafted. Such an achievement would be doubly useful, for if a method were found of restricting the profits of armament manufacture, one of the forces opposing effective limitation of arms would disappear.

The popular view that any highly industrialized nation can turn out munitions in wholesale fashion following the outbreak of war was disproved by the experience of Great Britain and the United States during the World War. Unless a policy of industrial preparation is deliberately adopted, there is a "conversion lag" of several years before a nation can be converted from a peacetime to a wartime basis. The object of any limitation treaty should be to extend this conversion lag and to prevent nations from adopting a policy of industrial preparedness. The armament establishments of each army must be limited and the manufacture of arms, whether by government or private enterprise, made to conform to this limitation. The draft treaty providing only for budgetary limitation of annual expenditures on arms is rendered largely ineffective by its failure to touch the material question.

Moreover an effective treaty must deal with the problem created by new inventions. Even should an agreement limiting the main existing types of arms be concluded, the balance would be upset and competition resumed if one nation invented a new weapon of war. Authorities such as Major Victor Lefebvre insist that it is only infrequently that new instruments of war are the by-product of industrial peacetime research. Rather they are the direct result of conscious military research, and moreover to convert an

inspired flash of discovery into a proved weapon active development is usually required. In other words, few military inventions would be made if governments abolished their military research laboratories and if the great international scientific organizations pledged their members to devote themselves to peacetime activities and to refrain from perfecting new devices for taking human life.

In the important field of chemical warfare the draft treaty provides for abstention from the use in war of asphyxiating, poisonous or similar gases and of all analogous liquid substances or processes. Bacteriological methods of warfare are to be unreservedly abandoned. Opinions differ whether the use of poison gas is less humane than the use of bayonets and bullets. Moreover it may be doubted whether a government which violates its obligation not to engage in aggressive war will observe an agreement not to use poison gas. It is also to be doubted whether a nation fighting in self-defense should be denied the use of any weapon deemed necessary to resist aggression.

Despite the obligation of article 8 of the Covenant of the League of Nations, which requires League members to exchange "full and frank information" as to the scale of their armaments, the majority of governments represented at the League Preparatory Commission declined to admit the principle of publicity in regard to material. Even should a government accept limitations upon material, it would be difficult without some form of international supervision to prevent it from evading treaty restrictions. Yet as the case of the interallied commissions in Germany showed, outside investigation into such questions may arouse intense ill will. All that the League draft treaty proposes is that any party may lodge with the Disarmament Commission a complaint that another party is violating or endeavoring to violate the obligations accepted in the disarmament treaty. The commission is to report on the subject but is given no authority to decide the dispute.

Even where agreement has been reached that effectives, including trained reserves, material and military expenditure, should be limited, there remains the fundamental problem of fixing the comparative military strength of each nation—the question of ratios. A theoretical basis for the solution of this problem was presented to the League Temporary Mixed Commission on Armaments in 1921 by Lord Esher. It proposed to limit the unit size of armies in each country to

30,000 men and to determine the number of units for each country by its population, industrial strength and strategic needs. Thus it was proposed to give France six units and Italy four. Because of the difficulty in deciding how many units each state should have, the plan failed of adoption.

Fearful of the superior industrial strength of Germany, the French representatives at the League Preparatory Commission advanced another theory, that of war potential. Under this theory a nation having an inferior war potential, or industrial capacity, should be given a correspondingly larger military force. The theory of war potential was based upon the unsound view that a nation having large industrial resources may convert them immediately to warlike purposes: it was the French army that stemmed the German invasion in 1914—not the superior war potential of Great Britain.

The two most practicable methods of fixing ratios are: first, upon the basis of the status quo; secondly, upon the basis of equality for the great powers. The insuperable difficulty with the first method is that some nations are unwilling to freeze the status quo. The application of this principle in 1914 would have meant the perpetuation of the supremacy of the British navy, which the United States would not accept; the application of the principle today would mean the perpetuation of the supremacy of the French army and air forces, which Germany and Italy will not accept.

The other alternative presents almost as many difficulties. If due allowance is made for the military needs of the French and Italian colonies, it is conceivable that at some time in the future France, Germany and Italy will admit the principle of equality in effectives and material. So long, however, as the political problems of Europe remain unsolved, so long as France fears that Germany wishes to upset the peace settlement of 1919, it will refuse to surrender its present military superiority. On the other hand, Germany is not likely to be satisfied with equality with France when a policy of alliances virtually places the armies of Belgium, Poland, Czechoslovakia, Rumania and Yugoslavia under French command. Naval limitation was achieved at the Washington and London naval conferences only after political confidence between the American, British and Japanese governments had been established. Similarly the fundamental question of limiting land armament cannot be solved until there is a reconciliation between France and

Germany and until international organization has been strengthened so as to provide each state with "security" against attack.

Realizing the difficulties of reaching an agreement according to the principle of either the status quo or equality, the World Disarmament Conference, which opened at Geneva on February 2, 1932, considered several new proposals. Here about twenty-eight governments supported the total abolition or the restriction of so-called aggressive weapons. It was argued that if weapons such as tanks could be abolished defensive fortifications and weapons would be strong enough to prevent invasion. Thus the abolition of aggressive weapons would automatically reduce the likelihood of aggressive war. Moreover this step would make possible an immediate saving in military expenditure, and it could be taken without attempting to solve the troublesome question of ratios. Opponents of the proposal declared, however, that it was impossible to distinguish between offensive and defensive weapons. During the Geneva debates the small powers contended that the battleship was "aggressive" and the submarine "defensive," the United States and Great Britain taking exactly the opposite position. It is stated also that a country called upon to defend itself must at some moment undertake a counteroffensive and that the only result of abolishing tanks and heavy artillery would be to prevent any decision and convert every war into an intolerable stalemate, entailing unnecessary loss of life. Moreover France could not abolish tanks and heavy artillery without at once reducing its superiority over Germany, since these weapons were denied to Germany by the Treaty of Versailles.

As its contribution to the disarmament conference the French government proposed the establishment of an international police force. The plan called for the establishment of an international civil air service to operate under League control all commercial airplanes above a certain tonnage. Likewise it called for the establishment of a small League army to be supplemented in time of need by national contingents. Finally, bombing planes would be exclusively in the hands of a League air force, while other "aggressive" weapons would be placed at the League's "disposal."

The French proposal to internationalize civil aviation had much to commend it. Under existing circumstances it seems impossible to limit military aviation because of the ease with which commercial airplanes may be converted for

military purposes. The creation of an international aviation company would meet this difficulty. Such a company would be interested not in advancing the ends of any government but in advancing commercial aviation in time of peace as well as war.

The other features of the project were a logical development of the principle of sanctions already embodied in the League Covenant. Nevertheless, in the present stage of international relations the French proposal is regarded by most governments as wholly impracticable. There is a danger that if an international police force is established before the system for pacific settlement of disputes is perfected, the force will become a means of perpetuating an unjust status quo and will fall under the control of a single power.

So far no proposal for the drastic reduction of any kind of armaments has met with success. This failure has been due largely to nationalist mistrust. A changed psychology will do something to remove this mistrust, but in the last analysis it is doubtful whether a new attitude toward this subject can be engendered until a world community perfecting new procedures and establishing new traditions has been developed. It would be a grave mistake, however, to abandon the present effort at disarmament until a world community has been established. Both developments must go hand in hand if either is to achieve success.

RAYMOND LESLIE BUELL

See: DISARMAMENT; PEACE MOVEMENTS; LEAGUE OF NATIONS; OUTLAWRY OF WAR; WAR; WARFARE; MILITARISM; ARMAMENTS; ARMY; NAVY; MOBILIZATION AND DEMOBILIZATION; CONSCRIPTION; MUNITIONS INDUSTRIES; ARMED MERCHANTMEN; SUBMARINE WARFARE; EXPENDITURES, PUBLIC.

Consult: Buell, R. L., *International Relations* (rev. ed. New York 1929); Kehr, Eckart, *Schlachtflottenbau und Parteipolitik 1894-1901*, Historische Studien, no. 197 (Berlin 1930); League of Nations, Secretariat, *Ten Years of World Co-operation* (Geneva 1930); Baker, P. J. N., *Disarmament* (London 1926); Madariaga, Salvador de, *Disarmament* (New York 1929); Lavallaz, Maurice de, *Essai sur le désarmement et le pacte de la Société des Nations* (Paris 1926); Williams, Benjamin Harrison, *The United States and Disarmament* (New York 1931); Lefebvre, Victor, *Scientific Disarmament* (New York 1931); Wehberg, Hans, *Die internationale Beschränkung der Rüstungen* (Stuttgart 1919); Wheeler-Bennett, J. W., *Information on the Reduction of Armaments* (London 1925); Buell, R. L., *The Washington Conference* (New York 1922); Ichihashi, Yamato, *The Washington Conference and After* (Stanford University 1928); Lyon, Jacques, *Les problèmes du désarmement* (Paris 1931); Foreign Policy Association, New York, *Information Service and Foreign Policy Re-*

ports, vol. v (1929-30) nos. 10 and 15, vol. vi (1930-31) nos. 2, 6, 17, 25, vol. vii (1931-32) nos. 8 and 20; Council on Foreign Relations, *Survey of American Foreign Relations*, published annually in New Haven since 1928.

For Official Documents, see: League of Nations, *Documents of the Preparatory Commission for the Disarmament Conference*, Publications, ser. 9, no. 7 for 1926, nos. 2, 5 for 1927, nos. 2, 6, 8 for 1928, no. 3 for 1929, no. 3 for 1930, and nos. 1, 3 for 1931 (Geneva 1926-31); Conference for the Limitation of Naval Armament, Geneva, 1927, *Records* (Geneva 1927); London Naval Conference, 1930, *Documents* (London 1930); *Conference on the Limitation of Armament, Washington 1921-22* (Washington 1922); League of Nations, *Armaments Year Book*, published in Geneva since 1924.

LINCOLN, ABRAHAM (1809-65), president of the United States. Abraham Lincoln, born in a Kentucky log cabin, was carried by the course of the westward movement across the Ohio River through Indiana and into central Illinois. His memory, however, long lingered fondly over his early days in Kentucky: "my state" he called it as late as 1856. Because of his humble origin the appeal of the frontier democracy which had elevated Andrew Jackson to the presidency should have gripped the young Illinois rail splitter. Yet thrown into political associations and soon into social contacts with a group to whom he proudly referred as "us Kentuckians," Lincoln chose to follow the standard of Henry Clay and to join the heterogeneous opposition which shortly became the Whig party. Even before it advanced positive principles or a definite program this party represented the combined forces of the propertied elements of the north and south, together with the traditions of wealth, intelligence and social standing. It was not at all surprising therefore that in 1843 when Lincoln was seeking nomination to Congress he was characterized by his political opponents as "the candidate of pride, wealth, and aristocratic family distinction."

Lincoln was early aroused by the inhumanity of the slave trade if not of slavery itself, but as he once said: "I bite my lips and keep quiet." He condemned the abolitionists as agitators who actually endangered the cause of freedom. During 1847-49 he served a single term in Congress, where he was active among the Wilmot Proviso foes of slavery extension; yet this did not prevent him from joining with a group of southern Whigs to name for the presidency General Taylor, who was a slaveholder, or from ridiculing the Free Soil party as being, like the Yankee peddler's pantaloons, "large enough for any

man, small enough for any boy." Even in 1854 when the Republican party was being created, he carefully held aloof from the movement and proclaimed the dying Whig remnant the true anti-Nebraska party. But by 1856 he had acquiesced in the inevitable and he took a prominent place in the Republican ranks. Meantime in his retirement from active politics Lincoln had been pondering the ethics of slavery and was becoming alarmed at the menace to "the white man's charter of freedom" which emanated from the ultra proslavery view that slavery was the normal status of the working classes. His "House Divided" speech delivered in 1858 sounded a warning of this danger. Nevertheless, he won the Republican nomination in 1860 because of his conservative views on slavery and was described by Alexander H. Stephens during the campaign as "just as good, safe and sound a man as Mr. Buchanan."

Both before and after his election Lincoln offered every reasonable guaranty to slavery as it existed in the southern states, but the Republican victory of 1860 was interpreted by the south as a sign that its peculiar institution was shortly to be attacked. The war which followed Lincoln envisaged as a conflict between two concepts of the role of labor. He had frankly declared his preference for a system "under which laborers can strike when they want to." He resented "the effort to place capital on an equal footing with, if not above, labor, in the structure of government." Southern secession constituted in effect an attack upon the rights of all working men; to him "the strongest bond of human sympathy, outside of the family relation, should be one uniting all working people, of all nations and tongues, and kindreds." There is little evidence that Lincoln foresaw the extraordinary industrial consequences for northern capital of a federal victory.

As a war president Lincoln found himself invested with dictatorial powers. Nor did he hesitate to use them. As stated in his own executive order of February 14, 1862: "He called into the field such military and naval forces, unauthorized by the existing laws, as seemed necessary. He directed measures to prevent the use of the Post Office for treasonable correspondence. He subjected passengers to and from foreign countries to new passport regulations, and he instituted a blockade, suspended the writ of habeas corpus in various places, and caused persons who were represented to him as being or about to engage in disloyal or treasonable prac-

tises to be arrested by special civil as well as military agencies, and detained in military custody. . . ." Despite these acts he sought to conciliate and control the most diverse forces. Generously disposed toward all southerners except the leaders of the Confederacy, he labored hard to please southern loyalists and at the same time to hold in check the rising tide of abolitionism in the north. More slowly than the dominant current of opinion there he moved toward a policy of emancipation. Northern Copperheadism had to be controlled; but while Lincoln permitted arbitrary arrests by important subordinates whose actions he could not afford to repudiate, he was only technically responsible for this limitation of the field of civil liberty and more than made up for this by restraining the forces which demanded the sweeping legislative and administrative suppression of freedom of speech and press. Perhaps there was no more significant item in his record than his action in revoking the order of General Burnside for the suspension of the *Chicago Times* and other papers, unless it was his wholesale release on parole of political prisoners by the executive order of February 14, 1862.

Lincoln's reconstruction policy was based essentially on the prompt restoration of the southern states to "their proper practical relation with the Union." The generosity of this program aroused the opposition of congressional spokesmen for the Republican party, who alarmed at the early readmission to Congress of the members of the seceded states before the attainment of the economic ends for which the war was being fought bluntly reminded the president "that the authority of Congress is paramount and must be respected; . . . he must confine himself to his executive duties . . . and leave political reorganization to Congress." This growing cleavage in the Republican ranks and the not unjustifiable insistence of the Democrats that the war had so far been a failure seemed to promise certain defeat for Lincoln in the 1864 campaign. The autumn, however, brought a number of notable victories in the field and Lincoln was returned to office by a handsome majority. That his reelection was likely only to complicate his problem of securing the continued cooperation of ardent northern leaders was clear from the developments of the ensuing winter and spring, when it became evident that former Copperhead critics were being attracted by his generous policy. To these and to conservative Republicans the martyred president

became "the Great Conciliator." But the northern radical Republicans, who at first could not conceal their relief at the removal of Lincoln from the helm, were soon creating the beginnings of the Lincoln myth, which credited him with a consistent and predestined devotion to the cause of abolition; by them he was proclaimed the "Great Emancipator" and thus he has remained for most Americans.

ARTHUR C. COLE

Works: Abraham Lincoln; Complete Works; Comprising His Speeches, Letters, State Papers, and Miscellaneous Writings, ed. by John G. Nicolay and John Hay, 2 vols. (New York 1894); *The Writings of Abraham Lincoln*, ed. by A. B. Lapsley, 8 vols. (New York 1905-06); *Uncollected Letters of Abraham Lincoln*, compiled by G. A. Tracy with introduction by Ida M. Tarbell (Boston 1917).

Consult: Beveridge, Albert J., Abraham Lincoln, 1809-1858, 2 vols. (Boston 1928); Herndon, William H., and Weik, J. W., *Herndon's Lincoln; the True Story of a Great Life*, ed. by Paul M. Angle (New York 1930); Weik, Jesse William, *The Real Lincoln; a Portrait* (Boston 1922); Masters, Edgar Lee, *Lincoln, the Man* (New York 1931); Nicolay, John George, and Hay, John, *Abraham Lincoln; a History*, 10 vols. (New York 1890); Cole, Arthur Charles, *The Era of the Civil War, 1848-1870*, Centennial History of Illinois, vol. iii (Springfield, Ill. 1919); Sandburg, Carl, *Abraham Lincoln, the Prairie Years*, 2 vols. (New York 1926); Schlüter, Herman, *Lincoln, Labor and Slavery* (New York 1913) p. 168-201; Barton, William E., *The Life of Abraham Lincoln*, 2 vols. (Indianapolis 1925).

LINGARD, JOHN (1771-1851), English historian. Lingard and Hume were the earliest modern historians of England who drew their information from original sources, and Lingard was the first to tell its story with real impartiality, notwithstanding his Catholic connections. At an early age he was given a scholarship in the English Catholic College at Douai and during his stay of eleven years was thoroughly educated in the classics, modern languages, philosophy and theology. Returning to England in 1793 he was for a short time tutor in a Catholic nobleman's family and then served for some years as teacher in the newly founded Crook Hall, Durham. In 1811 he was appointed Catholic pastor in the little village of Hornby in Lancashire, where he spent the remaining forty years of his life.

The material remains of early British church history in the neighborhood of Crook Hall and Hornby drew him to the study of that subject and in 1806 he published *The Antiquities of the Anglo-Saxon Church* (2 vols., Newcastle 1806;

5th ed. London 1858). These interests combined with his desire to correct what he considered Protestant misunderstanding of his church led him to undertake a general history of England, the *History of England from the First Invasion by the Romans to the Accession of William and Mary* (8 vols., London 1819-30; 7th ed., 10 vols., 1883). His object of reconciling differences between Catholics and Protestants is recognizable through the entire work. Issued by a Protestant publisher, it was even examined for infelicities before printing by a clergyman of the Church of England. The appearance in 1819 of the first three volumes, covering the Middle Ages, established his reputation; but as each successive volume appeared, covering periods of greater controversy, the attitude of strict impartiality became more difficult to preserve; and with the appearance of the eighth volume in 1830, bringing the work down to 1688, he recognized the impracticability of continuing it along the same lines and devoted the rest of his life to successive revisions and editions of his great work, to the writing of articles and pamphlets and to correspondence on the church problems of his time.

In the deep divisions of opinion and policy among English Catholics it was to be expected that the moderate nature of Lingard's work would be offensive to many. Nevertheless, it was well received by the great body of both Protestant and Catholic scholars, and the pope himself at one time ordered two hundred copies for distribution. In the Catholic controversies of the time Lingard took little part but aided in the various efforts, culminating in the Catholic emancipation of 1829, to secure for the Catholics a better political and social position in England. The sustained impartiality and evident learning of his work, the clarity of its style and its wide popularity doubtless had much to do with the increasing liberality of popular feeling in England toward Catholics.

EDWARD P. CHEYNEY

Consult: Haile, Martin, and Bonney, Edward, Life and Letters of John Lingard (London 1911); Gooch, G. P., *History and Historians in the Nineteenth Century* (London 1913) p. 284, 290-92.

LINGUET, SIMON NICHOLAS HENRI (1736-94), French lawyer, journalist and social theorist. Linguet, who came of a middle class family, had literary ambitions from early youth. At thirty he had already plunged deep into history, drama, verse, philosophy and politics. He had demanded reform of the legal system and of

taxation and had condemned the practise of massacring soldiers to make a despot's holiday. After winning the praise and support of Voltaire by his spectacular defense of some youths condemned to death in 1766 for the sole proved offense of reading the *Dictionnaire philosophique*, he became a famous lawyer admired for his eloquence and sought by distinguished clients. But in 1774 his legal career was abruptly ended by his disbarment as a result of his attack on the bench. Three years later he founded the important journal *Annales politiques, civiles et littéraires* (19 vols., 1777-92), which became a vehicle, supplementing his numerous pamphlets, for his unintermittent and versatile offensive against his contemporaries. The principal objects of Linguet's attack were the church, the rich, the economists and finally the philosophic ideal of political liberty. Keenly aware of the evils of the society in which he lived he condemned the remedies which were currently proposed. According to his political theory the state had no other object than to preserve property, defined by him as the claim of the few upon the labor of the many. Since property could originate and survive only through violence, the essence of the state was force. With vitriolic passion he flailed what he thought was the puerile idea that freedom could be won by the establishment of mere equality before the law. The *philosophes* and Anglo-maniacs who entertained this idea completely overlooked the real evil, which was economic inequality. But Linguet, who was analyst rather than reformer, could see no escape from the situation and pessimistically recommended passive acquiescence as the only intelligent course. His ideas were either derided or condemned as a defense of despotism. In 1780 he was imprisoned in the Bastille, from which he was released two years later under sentence of exile. During the period of his exile, the greater part of which was passed in England, he published his pungent *Mémoires sur la Bastille* (London 1783, new ed. by H. Monin, Paris 1889; tr. by S. F. Mills Whitham, London 1927) and through the *Annales* maintained a running commentary on European events. After the fall of the Bastille he returned to France, but only to be guillotined in 1794 as one who had consorted with tyrants and defended despotism.

In his perception that economic facts are more important in the life of the individual than political background Linguet was far in advance of any other thinker of his age. When in *Théorie des lois civiles* (2 vols., London 1767; new ed., 3 vols.,

Paris 1774), perhaps his most important work, he declared that men could not be really free if "they must go upon their knees to a rich man to gain from him permission to increase his wealth," he was crudely foreshadowing the doctrine of surplus value. His fame died before him, but his ideas had an important influence on Karl Marx. They are in fact more in keeping with twentieth century thought than with eighteenth. It is not surprising therefore that there are signs of re-awakening interest in Linguet.

H. R. G. GREAVES

Other important works: *La dîme royale* (Paris 1764, reprinted as *L'impôt territorial ou la dîme royale*, London 1787); *Histoire impartiale des Jésuites*, 2 vols. (Paris 1768); *Observations sur l'imprimé intitulé: Réponse des états de Bretagne au mémoire du duc d'Aiguillon* (Paris 1771); *Mémoires et plaidoyers*, 7 vols. (Amsterdam 1773; vols. i-ii, new ed., London 1787-88); *Essai philosophique sur le monachisme* (Paris 1775); *Théorie du libelle* (Amsterdam 1775); *Examen des ouvrages de M. de Voltaire* (Brussels 1788, new ed. Paris 1817), tr. by J. Boardman (London 1790); *La prophétie vérifiée* (Ghent 1789); *Lettre de M. Linguet au Comité patriotique de Bruxelles* (Brussels 1789); *Lettre à l'empereur Joseph II. sur la révolution du Brabant* (Brussels 1790); *Lettre de M. Linguet à un membre de la Société patriotique de Bruxelles* (Brussels 1790).

Consult: Cruppi, J., *Un avocat journaliste au XVIII^e siècle*, Linguet (Paris 1895); Greaves, H. R. G., "The Political Ideas of Linguet" in *Economica*, vol. x (1930) 40-55; Monin, H., Introduction to his edition of the *Mémoires sur la Bastille* (Paris 1889); Monselet, C., *Les oubliés et les dédaignés*, 2 vols. (Alençon 1857) vol. i, p. 1-49; Philipp, A., *Linguet, ein Nationalökonom des XVIII^e Jahrhunderts*, Zürcher volkswirtschaftlicher Abhandlungen, vol. i (Zurich 1896); Lichtenberger, André, *Le socialisme au XVIII^e siècle* (Paris 1895) p. 288-305; Martin, K., *French Liberal Thought in the Eighteenth Century* (London 1929) p. 253-56; Marx, Karl, *Theorien über den Mehrwert*, ed. by K. Kautsky, 3 vols. (Stuttgart 1905-10) vol. i, p. 77-85; Hatin, Eugène, *Histoire politique et littéraire de la presse en France*, 8 vols. (Paris 1859-61) vol. iii, p. 324-400.

LIPINSKY, VYACHESLAV (1882-1931), Ukrainian historian and nationalist leader. Lipinsky attended the *gymnasium* at Kiev and studied at the universities of Cracow and Geneva. Although by birth a Polish nobleman and by faith a Roman Catholic he identified himself in early youth with the cause of Ukrainian nationalism. In his first work, *Szlachta ukraińska i jej udział w życiu narodu ukraińskiego* (The Ukrainian nobility and its participation in the life of the Ukrainian people, Cracow 1909), he stressed the Ukrainian origin of the majority of the Polish nobility in the Ukraine and urged them to assume leadership in the movement toward a

Ukrainian renaissance. In 1918 he was sent by the hetman Skoropadski to Vienna as the first minister of the Ukrainian state; he continued for some time under the directorate which replaced the Skoropadski regime but, unable to agree with the political ideas of the new leadership, he resigned and spent the remainder of his life as a political émigré. In 1926 he was called to the Ukrainian Scientific Institute in Berlin, where he remained until 1928.

Lipinsky's chief claim to distinction rests on his original interpretation of the forces and ideals dominant in Ukrainian history. Departing from the traditional populist school in Ukrainian historiography, which interpreted the history of the country exclusively in terms of a continuous struggle of oppressed masses against the feudal exactions of a native and foreign nobility, he attempted to prove, first, that the recurrent uprisings of the Ukrainian masses were animated by the political ideal of the reestablishment of a Ukrainian state and, second, that the Ukrainian nobility played the most constructive part in the actual organization of these struggles. It was only after the collapse of the Khmelnytsky wars—the Ukraine's most heroic bid for political independence—that Ukrainian nobility succumbed to Polonization and Russification and the national ideal was deflected from the struggle for an independent state into the movement for cultural survival within the political boundaries of Russia, Poland and later also Austria-Hungary. It is the task of Ukrainian leaders, he insisted, particularly of the politically conscious nobility, to restore the original political ideal to the Ukrainian masses. Building upon his interpretation of Ukrainian history he evolved in his *Listi do bratv chliborobiv* (Letters to fellow agriculturists, reprinted Vienna 1929; first published in the collection *Chliborobska Ukraina*, Agricultural Ukraine, ed. by Lipinsky, 5 vols., Vienna 1920–25) an elaborate theory of the Ukrainian state, organized on a corporate basis and ruled by a monarchy based on a broad aristocracy, recruited from all classes of the people. Lipinsky's historical works were hailed by some as marking a new epoch in Ukrainian historiography, but his general interpretation and conclusions have been criticized by Hrushovsky.

NATHAN REICH

Other works: *Z dziejów Ukrainy* (in Polish) (From the Ukrainian past) (Cracow 1912), a collection of studies edited and written largely by Lipinsky, some of which were reprinted in revised form in his *Ukraina na pere-*

lomi 1657–1659 (Ukraine at the turning point) (Vienna 1920); *Religia i tserkva v istorii Ukrainy* (Religion and the church in Ukrainian history) (Philadelphia 1925).

Consult: Doroshenko, D., "Vjačeslav Lipinsky" in *Ukrainisches wissenschaftliches Institut, Berlin, Abhandlungen*, vol. iii (1931) 157–66, and *Ohlyad ukraïnskoiï istoriografii* (Prague 1923) p. 209–12.

LIPPERT, JULIUS (1839–1909), German sociologist and historian. After receiving training in history Lippert taught in Bohemia and Germany and served one term in the Austrian parliament and several in the Bohemian legislature. His first important works were in the field of comparative religion, followed by studies in the history of the family and in material culture, the results of which he synthesized in his greatest work, *Kulturgeschichte der Menschheit in ihrem organischen Aufbau*.

Although his method and point of view align him with Tylor, Morgan, Spencer and other members of the classical evolutionist school of anthropology and sociology, Lippert anticipated modern writers in his recognition of the role of cultural diffusion and in his emphasis on the superorganic nature of culture. The determinants of cultural phenomena were to him never biological or psychological factors such as race, heredity, genius or instincts but always cultural, especially economic, factors as these are conditioned by historical and geographical influences. He assigned to ideas, particularly religious ideas, an extremely important role in cultural evolution and consistently stressed the interrelation and interdependence of social phenomena. Lippert demonstrated the economic basis and superorganic character of human marriage and shed light on the confused problem of the relation between religion and magic by his original treatment of fetishism. His work has received wide recognition and has had influence among sociologists in Germany, Russia and in certain circles in the United States.

GEORGE P. MURDOCK

Important works: *Der Seelencult in seinen Beziehungen zur althebräischen Religion* (Berlin 1881); *Die Religionen der europäischen Culturvölker* (Berlin 1881); *Christenthum, Volksglaube und Volksbrauch* (Berlin 1882); *Allgemeine Geschichte des Priesterthums*, 2 vols. (Berlin 1883–84); *Die Geschichte der Familie* (Stuttgart 1884); *Kulturgeschichte der Menschheit in ihrem organischen Aufbau*, 2 vols. (Stuttgart 1886–87), tr. by G. P. Murdock as *The Evolution of Culture* (New York 1931); *Deutsche Sittengeschichte* (Leipsic 1889); *Sozialgeschichte Böhmens in vorhussitischer Zeit*, 2 vols. (Vienna 1896–98).

Consult: J. P. Murdock's introduction to his translation of *Kulturgeschichte*, p. v–xxxii; autobiographical

sketch in *Deutsche Arbeit*, vol. v (1905-06) 25-34, tr. by A. W. Small in *American Journal of Sociology*, vol. xix (1913) 145-65.

LIPSIUS, JUSTUS HERMANN (1834-1920), German classical philologist and historian. Lipsius studied at the University of Leipsic and taught at the Nikolaischule in Leipsic from 1863 to 1877 and at the University of Leipsic from 1877 to 1914. His first writings were concerned with the Athenian orators. He revised the works of M. H. E. Meier and G. F. Schömann on Athenian legal procedures; but when Aristotle's treatise on the constitution of the Athenian state was discovered in 1891, he realized immediately that this work involved a change in the conception of Athenian legal procedures. His first efforts in this direction were contained in his revision (2 vols., Berlin 1897-1902) of G. F. Schömann's *Griechische Alterthümer*, originally published in 1855-59. His chief work, however, is *Das attische Recht und Rechtsverfahren mit Benützung des attischen Processes von M. H. E. Meier und G. F. Schömann* (3 vols., Leipsic 1905-15), which reveals a complete mastery of Attic sources as well as occasional utilization of other Greek legal data. As far as its method is concerned the book presents a commentary on the Athenian writers, particularly the orators, rather than a study of Greek law. The first volume is an introduction to the constitution of the courts of justice; the second deals with legal actions, which are classified as private and public and also in accordance with the authorities under whose jurisdiction they fall; while the third is devoted to legal procedures. The study is not concerned with the actual law or with the content of criminal and private law but rather with the question of legal actions and procedures. Actions moreover are described not from the point of view of their proper purposes but from that of competencies. As a result the work has only an antiquarian value and by no means affords an insight into the development of the legal aspect of Greek cultural life. Lipsius himself recognized this shortcoming, which reflects a lack not of ability but of proper method. In the preface to the last volume he suggested the desirability of a study of Greek rather than Athenian law, which, he maintained, should combine the methods of philology and jurisprudence.

EGON WEISS

Consult: Körte, A., "Worte zum Gedächtnis an Justus Hermann Lipsius" in *Sächsische Akademie der Wis-*

senschaft zu Leipsic, Philologisch-historische Klasse, Berichte über die Verhandlungen, vol. lxxiii (1921) 41*-50*; Poland, Franz, in *Biographisches Jahrbuch für Altertumskunde*, vol. xlv (1924) 1-36, with full list of the works of Lipsius.

LIPTON, SIR THOMAS JOHNSTONE (1850-1931), British merchant. Lipton, who had but a few years of formal schooling, worked as a boy in his father's small provision shop in Glasgow. On his twenty-first birthday he opened his own provision shop, where from the first he applied those modern principles of merchandising then being developed in England, on the continent and in the United States: careful buying for cash, good quality, attractive display, advertising, cash sales at small profit and rapid turnover. He was a pioneer in the use of intensive advertising, including what are now called ballyhoo methods. Lipton was also the most important pioneer of the chain store system in England; as soon as his capital permitted he opened other shops in other cities, and the number of Lipton markets all financed by the reinvestment of profits multiplied rapidly in Scotland, Ireland and England. A central depot in Glasgow, later moved to London, carried on considerable manufacturing. Wherever possible the Lipton organization bought direct from producers and also, particularly in later years, produced many of its own raw materials and manufactured many of its own products. In 1898 the business was incorporated for £2,000,000 as Lipton, Ltd., the company owning in addition to retail provision shops many tea, cocoa and rubber plantations in Ceylon and factories and warehouses in London and elsewhere. Lipton was probably the most important and successful of the British merchants who applied modern capitalist methods to merchandising.

MILDRED HARTSOUGH

Consult: "Leaves from the Lipton Logs," ed. by William Blackwood in *Saturday Evening Post*, vol. cciii (1930) August 16, 23, 30, September 6, 13, 20 and 27; *Stock Exchange Official Intelligence*, vol. xlix (London 1931) p. 833; *Stock Exchange Year-Book*, vol. lvii (London 1931) p. 2802-03.

LIQUIDITY. This term when applied to an article of wealth or a credit item denotes the possibility of raising cash upon it by selling it or pledging it as security for a loan; in reference to a business concern liquidity is measured by the availability of cash, whether direct and immediate or indirect and involving the conversion of some assets into cash to meet ordinary or extraordinary demands upon it. The assumption in

both cases is that the conversion can be carried out expeditiously without sacrifice of values and with slight cost and disruption of operations. Liquidity must be clearly distinguished from solvency; a concern with assets of a current exchange value equal to or greater than its liabilities to creditors may be either liquid or illiquid, depending upon the character and distribution of its assets.

All the problems of liquidity for ordinary articles of wealth are present also in connection with liquidity of credit instruments, which can therefore best serve as the basis of a general discussion. A credit instrument may be liquid by virtue of the self-liquidating character of the transaction underlying the credit, the marketability of the collateral or the marketability of the credit instrument itself.

A credit instrument involving a sale of goods is said to be self-liquidating when it is assumed that the buyer can within the period of the credit sell the goods and thus acquire the funds necessary to discharge his debt at maturity. The principle of self-liquidation underlies the policies and practises of commercial banking. A commercial bank generally insists that borrowers' notes cover transactions or be secured by collateral which in the ordinary course of production and orderly marketing may at maturity provide the debtor with sufficient funds to repay the debt; that the margin of security be adequate to protect the bank during the full term of the loan; and that the collateral consist of warehouse receipts, bills of lading or similar documents conveying or securing title to non-perishable and readily marketable staple products or that it be a chattel mortgage or other like instrument giving a prior lien upon livestock which is being fattened for market. Of course the fact that the instrument is tied to a specific transaction does not assure its liquidation, first, because its face amount is consonant with the current price level of the commodity involved, which may be unduly inflated at the time by this and similar transactions, and, second, because its actual liquidating power rests not in the transaction itself but in the buyer's future operations or in lieu thereof in the seller's; the buyer also may meet his obligation with funds derived from an outside source and not from the sale of the goods bought. The liquidity of the instrument therefore rests ultimately upon the credit of the buyer and upon the marketability of the commodity; that is, in the ideal case upon the presence of ready markets with such frequent quotations of

price as to make the price easily and definitely ascertainable and the commodity itself easy to realize upon by sale at any time. If business conditions are stable and the purchase underlying the credit is not too speculative, the risk involved in credits of this type is small; for this reason such credits rank well in liquidity.

There is a related but different type of liquidity when the instrument is collateralized by readily salable securities but does not arise out of a sale in the ordinary course of production and marketing, does not possess a maturity related in any way to the turnover of goods and represents what is probably a speculative credit. The liquidity of such loans rests upon the organizational development of the market for the collateral: the size of the clientele of buyers and sellers, the frequency of sales and consequent continuity of market, the standardization of the commodity and of the terms of sale and the possibility of selling short and of buying and selling for future delivery and on margin. The outstanding example of such credits is the brokers' loan, collateralized by stocks and bonds in the financial center. Most brokers' loans are call loans; if change of price of the collateral jeopardizes the safety of the loan, the lender calls upon the borrower for additional collateral and, if the latter fails to comply, sells the collateral.

Another type of liquidity is based upon the possibility of the outright disposition by sale or discount of the credit instrument itself rather than of the collateral which may support it. This form of liquidity requires a highly organized market for the paper, a big purchasing fund in the hands of buyers and standardized credit instruments of convenient form and denomination. In such a market the holder may readily dispose of a credit instrument at a price equal to face value minus interest to maturity. It is obvious that liquidity of this sort results from the shifting of liabilities to other lenders and may therefore be designated as shiftability. For short term credit instruments liquidity of this type is assured by the existence of a broad discount market, generally provided by a central bank, and of acceptance and commercial paper markets, where bankers' acceptances and commercial paper issued by large and well established concerns are bought through brokers or dealers by banks or private individuals for the temporary investment of surplus funds.

While the liquidity of a business concern rests upon the liquidity of its assets, it depends more specifically upon a type of financial management

which assures the regular inflow of funds in time to meet maturing obligations. A commercial or industrial house will sell goods on such terms as will match in maturity the debts it owes for materials, supplies and the like; a bank will enlarge its holdings of paper maturing before the Christmas holidays, when heavy withdrawals of deposits are certain to occur. Thus instead of each instrument providing for its own liquidation one account, bill or note receivable matures and provides funds to liquidate a maturing account, bill or note payable. In banking usage this practice is called rotation of the portfolio.

The liquidity of an ordinary business institution rests not only upon its ability to meet obligations as they mature but also upon its possession of a reserve of assets readily convertible into cash to allow for unexpected demands. The necessity for reserve liquidity rests upon and varies directly with the variability of economic life: the presence of cyclical, seasonal and irregular fluctuations requires from time to time the conversion of assets into cash to meet fortuitous changes in economic circumstances. The problem of reserve liquidity for an agricultural, industrial or commercial concern is easily solved where it has well established banking connections; assets which it is not desirable to sell or which do not command a ready market may afford sufficient security for a bank loan to tide the concern over an emergency. A banking institution is as a rule much more vitally concerned with liquidity than is an ordinary business establishment; this is a direct outcome of the nature of commercial banking operations, in which demand liabilities are balanced to a large extent by assets of short term maturity. Moreover the liquidity of banks is vastly more important to the business community than that of its other constituents; for banks provide the mechanism which assures the smooth circulation of short term credits and serve as the central repository of liquid funds. The liquidity of its banks is an essential prerequisite for liquidity of all other business enterprise in a community; it is equally true, however, that the liquidity of the banks is based in the last resort upon the smooth functioning of the production and marketing machinery.

In general the degree of liquidity of the bank's assets should be in proportion to the probability of its needs for cash; thus the higher the proportion of demand liabilities to total liabilities, the more unstable the temperament of the community, the more homogeneous the circle of de-

positors and the larger the proportion of deposits owed to a few people or to other banks, the greater must this liquidity be. The liabilities which may cause a demand for cash differ in relative proportions as among individual banks in a country and as among the banks of countries as a whole, and the provisions for liquidity must vary accordingly. Of the two leading liabilities deposits bulk much larger than banknotes in the United States, Canada, England and Australia. In securing its liquidity an American bank is concerned therefore almost wholly with meeting deposit withdrawals. To do so the bank maintains an adequate cash reserve and selects carefully its loans, discounts and security investments. It is not necessary of course that all of these assets be highly liquid. The primary reserve, consisting of cash in vault and immediately available balances with other banks, should be sufficient to meet the probable maximum of ordinary daily net withdrawals; it should be supplemented by a secondary reserve consisting of highly liquid earning assets sufficient if liquidated to meet exceptionally large withdrawals due to season, sudden market turns or panicky runs for whatever reason. The secondary reserve may cover such items as government securities, first class listed active bonds, commercial paper and acceptances and other paper eligible for rediscount or for sale in the open discount market. Special provisions are made to meet the other liabilities: the ownership and pledge of United States bonds and lawful money to secure the immediate payment of national banknotes, the ownership and pledge of acceptable paper and securities to cover advances from correspondent banks and the Federal Reserve Bank and the pledge of collateral to support the customers' liability for acceptances executed for them by the bank.

The cardinal principle of English commercial banking as developed in practise and in the writings of its theorists was an insistence that commercial banks confine themselves exclusively to short term financing of a mercantile character and not supply fixed capital for industrial or other undertakings; it was argued that as long as a bank's assets consisted of cash and short term self-liquidating commercial paper the maturity and payment of one batch would provide funds for new loans and keep the bank's portfolio in a flexible form to meet the slight variations from time to time, and that the lending of any funds on mortgages would disrupt that smooth flow into and out of the bank and make it impossible

at times to meet demand liabilities. This doctrine, conceived at a time when bank liabilities consisted almost wholly of circulating demand notes and when securities and discount markets were young, poorly organized and undependable, became so strongly entrenched in theory and practise that it survived long after these conditions had passed and is still current at the present time. The English banks have therefore virtually no investment accounts and although they keep small primary reserves maintain a high state of liquidity through their large secondary reserves.

The American banks copied the English notion of commercial banking; the struggle to achieve liquidity through limitation of loans and discounts to short term self-liquidating paper was carried through the years by state and national systems and into the Federal Reserve, but in general it has represented an ideal impossible of achievement under American conditions for several reasons. The advances made by the thousands of local independent banks have been mainly to farmers rather than to urban distributors and in large part necessarily intermediate or long term loans secured, if at all, by growing crops, real estate or farm equipment, none of which has a ready market. The scarcity of capital under circumstances which called for the development of vast virgin resources compelled banks to extend capital loans, a practise to which they were led by the desire to make profits and by the appreciation of the duty of a bank to distribute credit in such a way as reasonably to meet the community's requirements. The prevalence of the open account, cash discount and single name paper system and the lack of a discount market made the liquidation of receivables through sale or rediscount very difficult, thus minimizing the difference in liquidity between capital and commercial loans. On the other hand, the improved organization of the securities market and the increased stability of earnings of corporate securities have raised their liquidity. In general as banks come to finance the ever widening diversity of economic activities it is impossible for them to abide by the mid-Victorian doctrines of liquidity. The portfolio must consist of a wide variety of paper and securities consonant with the "department store" type of organization and service rendered by modern banks. Banks must supply all the capital needs of an industry—for building and equipment of plant, purchase of materials and production and marketing of products; this they have been doing more and more, either directly or through affiliated insti-

tutions. On the continent the general bank has long functioned in this complete way, identifying itself closely with the institutions or industries it finances; and undoubtedly the English and American banks will gradually assume a similar role. Liquidity of the bank will thus become more involved with the stability and liquidity of the industry or industries financed.

The liquidity of one bank is generally dependent upon the liquidity of other banks in the system. Under normal conditions funds are not held idle outside of banks, and when deposited in banks they are quickly utilized in large part by loans and investment. Consequently when a bank contracts its holdings of acceptances and commercial paper, the debtor must either reduce his balance to pay off the paper or find a buyer elsewhere for a new issue to take up the old. If a bank calls its broker's loans, the broker finds another lender from whom he gets funds to pay the calling bank; if it proves necessary to liquidate the collateral, the buyer of the securities draws upon his balance, causing his bank to contract, or borrows funds elsewhere to pay for them. If a bank strengthens its cash position by borrowing from a correspondent, the latter may have to call other loans or sell securities or at least part with some liquid cash. It appears therefore that the improved liquidity of one institution may lower the liquidity of another and moreover that a simultaneous liquidation of call loans, commercial paper or other assets by all banks is impossible without sacrifice of values. In time of panic securities, both those owned and those held as collateral for loans, become unsalable in the hands of the banks; to sell would force a severe break in the market, with consequent disaster to customers and to the banks themselves. It is an interesting and significant fact that after the 1929 stock market crash in the United States the reporting member banks' loans on collateral, including both brokers' loans and direct loans to individual customers, amounted to substantially the same figure as before. In emergencies of this order it is highly advantageous if a central bank stands by with unused funds and lends freely to support the market. A basic principle of central bank policy as developed in the Bank of England is to stem panics by just such action; while in the pre-war panics in the United States the absence of such support was profoundly felt, in the 1929 panic the Federal Reserve Banks loaned freely to member banks, call loans remained liquid and interest rates did not rise above 6 percent.

In modern highly integrated banking systems the central bank is valuable as an agency assuring liquidity not only in times of panic and stress but also under normal circumstances. By rediscounting, lending or purchasing their assets from individual banks the central bank serves as the immediate or ultimate source of funds for the commercial banks of a country. In order to tap this source, however, the banks must so conduct their business as to have sufficient eligible and acceptable paper and securities and to keep their borrowings within the limit set by the central bank. The central bank, because of its public responsibility, tends to maintain a very liquid position. Its assets consist largely of gold and lawful money, the ultimate reserves of the banking system; of short term commercial paper, obtained by rediscounting for other banks or by open market purchase; and of short term government securities. The lending power of a central bank is much greater than that of an ordinary commercial bank; the only limitation upon its ability to issue notes, create deposits and rediscount or purchase paper is the danger of inflating the general price level or the securities market to a point at which the gold reserve is driven abroad or into hoarding, the reserve ratio is ominously low and a general financial collapse is imminent. Within these broad limits the central bank constitutes a defense of the liquidity of the system. Since it is a central bank extending credit to all parts of the country and to all lines of industry there is opportunity for a turnover of portfolio or the shifting of funds from region to region and from line to line as conditions require; but it need not rely upon such safeguards of liquidity, for it may freely create notes and deposits.

The extraordinary powers enjoyed by the central bank by virtue of its command of the pooled reserves of the country and of its right to issue notes do not protect it completely from the threat of illiquidity. The test of the central bank's liquidity occurs, however, not in meeting obligations in the domestic market but in responding to the call of foreign creditors in terms of the international currency, gold. Situations in which such a test cannot be withstood may be due to loans to foreign central banks or other foreign institutions which result in a continuous gold drain and become frozen; more often, however, the call from abroad upon the central bank's reserves merely reflects the position of the national economy, of whose liquidity it is the guardian, with reference to the world market.

The outcome is the abandonment of the gold standard, that is, the admission of international illiquidity, and the careful management of financial relations with foreign countries in order to attain liquidity on a new basis. It is the fear of being forced to depart from the gold standard which sometimes prevents central banks from assuring as much liquidity in the domestic markets as appears necessary. In such cases resort is had to ad hoc organizations, such as the War Finance Corporation after the World War and the Reconstruction Finance Corporation in 1932; these organizations are able to obtain long term capital funds and lend them on what would otherwise be frozen assets, thus relieving the necessity of forced liquidation and postponing payments until more favorable times.

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See: BANKING, COMMERCIAL; BANK RESERVES; CENTRAL BANKING; FEDERAL RESERVE SYSTEM; FINANCIAL STATEMENTS.

Consult: Dunbar, C. F., *The Theory and History of Banking* (5th ed. New York 1929); Anderson, B. M., Jr., *The Value of Money* (New York 1917) ch. xxiv; Moulton, H. G., "Commercial Banking and Capital Formation" in *Journal of Political Economy*, vol. xxvi (1918) 484-508, 638-63, 705-31, and 849-81; Mitchell, Waldo F., *The Uses of Bank Funds* (Chicago 1925); Watkins, Leonard L., *Bankers' Balances* (Chicago 1929); Atkins, P. M., *Bank Secondary Reserves and Investment Policies* (New York 1930); Weber, Adolf, *Depositenbanken und Spekulationsbanken* (3rd ed. Munich 1922); Mering, Otto von, *Die Liquidität der deutschen Kreditbanken* (Jena 1916); Zentner, G., *Das Liquiditätsproblem in der industriellen Unternehmung, Betriebs- und finanzwirtschaftliche Forschungen*, 2nd ser., no. 58 (Berlin 1932).

LIQUOR INDUSTRY. The universal prevalence of alcoholic beverages in primitive African culture is sometimes explained by the scarcity and uncertainty of pure water. But the primitive Gauls and Teutons, who had no lack of good drinking water, brewed a dark beer for daily consumption. In primitive societies generally alcoholic beverages have been used variously as a common drink, in ceremonial festivals and to stimulate merrymaking. Thus the Kiwai Papuans of British New Guinea prepare a peculiarly stupefying beverage from the root of a native plant, a small quantity of which renders the drinker unfit for anything but sleep. The desert dwelling Amerinds concocted a very heady drink by chewing beans and roots in a mouthful of water, expectorating the liquid mash into a skin container and then setting the mixture out into the sunlight for fermentation. On the other

hand, some primitive African tribes brew their beer by a process of malting and mashing.

Ancient Babylonian records from the time of Sargon I depict the process of brewing beer from cereals and show plainly that beer was used as a household beverage. That the dispensing of liquor was a common practise in this ancient society is indicated in the Code of Hammurabi (c. 2100 B.C.), in which are contained decrees regulating the activities of tavern keepers. In Egypt as far back as the Old Empire the making of wine and beer was evidently common; the same was true among the ancient Hebrews, as evidenced in *Genesis* (ix: 20-21): "And Noah began to be a husbandman, and he planted a vineyard: and he drank of the wine, and was drunken" Wine making was a major industry in Greek and Roman civilizations; indeed the whole Mediterranean area was almost one vast vineyard. The fragrance and taste of wines stamped their locality; wines from Lesbos, Chios, Sicily, Samos and Thrace were praised by poets and sought after by connoisseurs. Wine was a common retail and wholesale commodity and the subject matter of commercial treaties.

During the early Middle Ages beer and wine were produced for local consumption. Almost every manorial establishment had its brewhouse, while the wine presses were a source of feudal payments. The monks also were brewers and vintners. It was in the monasteries that the mysteries of the arts of brewing and wine making, which later became the basis of one of the most important handicrafts of the period, were developed. Early in the Christian era the monks had taught the primitive Gauls and Teutons to grow grapes and to ferment wine; so also they now taught the new class of craftsmen the art of wine and beer making. With the growth of the free cities and with the expansion of European trade the manufacture of alcoholic beverages became a leading industry, which was organized in the familiar pattern of the guild and town economy. Craft guilds established rules of apprenticeship, limited competition, set standards of quality and fixed prices. Merchant guilds controlled export and import trading, sought and obtained special privileges in trade centers, regulated commercial practises and as a result waxed rich and powerful. By the fourteenth century the trade in wine and beer had reached significant proportions. Thus a large part of the commerce of the Hansa cities was in beer and wine; it may almost be said that the prosperity of Hamburg was built on beer, for its alcoholic

wares even reached Asia by way of Novgorod. Wine flowed from the southern isles of the Mediterranean to the northernmost part of Europe. The beginnings of the English mercantile marine may be laid to the wine trade. After the wine merchants of Bordeaux had ceased trading in English ports because of the many restrictions imposed upon them, English merchants were forced to build their own ships to secure the wine England demanded. Duties on wine moreover were weapons in the struggle for national dominance, and eighteenth century England, for example, placed discriminatory duties on French wines in order to cripple the commercial power of its rival. Throughout Europe beer and wine were common beverages plentiful in supply and low in price.

It was during the Middle Ages too that distilled liquor was first produced. The distillation of liquids had been known to the ancient Chinese, Hindus, Assyrians and Greeks, but there is no record that the process was applied to the production of beverages. By the twelfth century, however, whisky was already in use in Ireland and probably also in Scotland; brandy appeared a little later in Spain and France; and in the fifteenth century it was brought from Italy into England and Germany. The same period also saw an increase in the number of different wine spirits. A Benedictine monk produced a wine spirit of rare taste, dedicated it to God and called it "*Benedictine, Deo Optimo Maximo.*" It is interesting to note that the manufacture of whisky was one of the earliest capitalistic enterprises. Whisky distilling was made a free pursuit in England in the seventeenth century, and a discriminatory tax laid on malt and ale to encourage the consumption of spirits made from English corn created a profitable field of enterprise for whisky distillers.

Not unlike other industries the liquor industry was subjected to a superstructure of regulations. In addition to the guild rules there were various municipal ordinances and crown decrees, which, as contradictory as they were varied, reflected the interests of many political and trade groups. Some codes sought to safeguard the monopoly of the various crafts engaged in the liquor trade; others fixed trade practises and forbade technical innovations; and still others were designed for the protection of consumers. Since lords and nobles were interested in the traffic, it was natural that royal decrees should appear to add their weight to local ordinances. Such decrees usually prescribed

standards of quality, fixed prices and regulated the places of sale. Henry VII in 1495 empowered any two justices of the peace "to reiecte and put away comen ale selling in Townes and places where they shall thinke convenient, and to take suerties of the keepers of ale houses of their gode behavyng . . ." (11 Henry VII, c. 2.). Taxation too was variously motivated, the usual purposes being to secure revenue, to make control effective and to impose discriminatory favors and disadvantages.

In modern times the liquor industry has occupied only a secondary role in the economic life of nations. In the United States, for example, the investment in the liquor industry in 1914 was only \$962,482,000, or slightly over 4 percent of the total capital value of manufacturing establishments, and wineries, distilleries and breweries employed 72,600 persons, less than 1 percent of the total industrial man power. With the exception of the Latin countries and such small areas as Tunis and Cyprus alcoholic beverages constitute a minute fraction of the import and export trade of modern nations. In France in the decade after the World War, while from 20 to 25 percent of the total exports of foodstuffs and drinks were alcoholic beverages, drink rarely accounted for more than 3 percent of the annual exports of the country.

The production of wine and spirits is highly localized. A line drawn to include Algeria, Morocco, Tunis, Italy, Spain, Portugal and all of France but its twelve northern and north-western departments would enclose more than 80 percent of the world's vineyards. In 1900 total world production was approximately 158,400,000 hectoliters, of which the western Mediterranean area was responsible for approximately 150,000,000 hectoliters. In 1929 total world production was 177,600,000 hectoliters, while the western Mediterranean area produced 151,500,000 hectoliters.

The natural superiorities of soil and climate are usually advanced as the basis for this high degree of localization. On the other hand, areas which are not now devoted to intensive viticulture might become so if climate and soil were the only considerations; California, Argentina, Chile, Cape Colony in Africa, and Australia are all potential wine centers. It is interesting to remember that in the ancient world the eastern Mediterranean area was rich in grapes and wine while today production in that region is slight. It would seem that at least part of the explanation must be sought in those historical factors

which have perpetuated wine and wine making as the traditional beverage and occupation of the inhabitants of the western Mediterranean area.

The manufacture of beer shows a similar concentration. The beer producing nations of the world are the United Kingdom and Germany. Until the World War beer produced by the United Kingdom, Germany, Austria and the United States (where the brewers were chiefly German) made up most of the world production; since the war, however, Austrian production has declined sharply, that of France and Belgium has greatly increased, while American beer manufacturing has been cut to about 30 percent of the pre-war figure because of the outlawing of alcoholic beverages by the Eighteenth Amendment. In 1900 the total world production of beer was approximately 237,354,000 hectoliters, of which the United Kingdom, Germany, Austria and the United States brewed 193,157,000 hectoliters. In 1925 the total world production (excluding the United States) was about 139,819,000 hectoliters, of which the United Kingdom, Germany and Austria were responsible for 87,022,000 hectoliters.

Until the late nineteenth century there was localization within the major producing areas as well. Because the acidic content of water is important in brewing, brewers concentrated in areas where the waters contained a large percentage of acid. It became apparent that beer spoiled easily in warm temperatures, so that plants were located largely in cool climates. Moreover as in the case of wines the taste and color of typical beers became associated with certain localities. Today, however, technical innovations have succeeded in placing both water and temperature under chemical and physical control, so that beer can be manufactured anywhere; other factors contributing to the shift in beer production have been the general availability of the raw materials used in brewing and the ease with which the needed technical information can be obtained. The result has been a fairly wide dispersal of beer manufacture in recent times. In the United States after the 1890's new breweries sprang up throughout the south, breaking down the monopoly of the midwestern brewers.

The distribution of the production of distilled liquor is less concentrated. In 1910 the large producers of distilled liquor were the United States, the United Kingdom, Austria, Germany, France and Russia. After the World War, however, Austria and Russia became small producers,

while the production of distilled liquor declined generally in Europe. In 1900 the total world production of distilled liquor was in the neighborhood of 18,075,000 hectoliters; in 1927 total world production, excluding Russia, the United States and Switzerland, was approximately but 7,734,000 hectoliters.

The figures of per capita consumption of the various alcoholic liquors show interesting variations in national tastes. The Italians drink a great deal of wine but consume very little beer or distilled liquor. Germans, on the other hand, favor beer and distilled liquor and drink relatively little wine; the inhabitants of the United Kingdom display the same preferences and prejudices; so did the American preprohibition population. The French drink wine, beer and distilled liquor with almost equal impartiality. As for Swedes, Norwegians and Danes, they drink large quantities of beer, considerable distilled liquor and but little wine. With the exception of wine the trend in liquor consumption showed a material decline between the years 1900 and 1929. It would seem that the world is becoming slightly less alcoholic.

At one time in England wine was red and sweet and beer was dark, heavy and bitter. Standards of quality were set by tasters, who acquired the dignity of a craft and merited the recognition of an official oath. Today there are numerous varieties in all types of alcoholic beverages as well as many ingenuities of production and variants of taste. Hence standards of quality are very uncertain. It is in many instances difficult to define adulteration. Early beers were made generally of water, barley malt, hops and yeast. The brewing technique was crude, so that a considerable body of solid material remained in the final product; the resulting dark and heavy beer was protected by English law against the competition of brewed beverages made by other processes or with different materials. In time, however, substances like sugar and unmalted cereals, which had formerly been looked upon as adulterants, came to be accepted in the manufacturing process. In the late nineteenth century there began an increase in the use of cane sugar, grape sugar, glucose and maltose for a part of the malt; it was found too that the quantity of hops could be diminished. Malted isinglass put in the ferment deposited a large part of the heavy matter and left the beer bright and transparent. Artificial refrigeration shortened the time required for ripening, thus further reducing the cost. Finally, the addition of carbonic acid gas gave

the beer an effervescence. The resulting new beer was light in color, low in alcoholic content, clear and sparkling. It rapidly became the national beer in the United States and has recently increased greatly in favor in Europe. To the few who cling tenaciously to the traditional beer, however, it is not genuine but adulterated.

Chemical advances applied to distilled liquors have so far failed to overcome traditional prejudice. A Canadian law requires that whisky remain in bond for a given period of years in order to insure the existence of wood matter in the beverage. Any one of the commonly known whiskies may be made by shaking water, alcohol, certain oils and flavorings together. The synthetic whisky thus produced has the same taste, appearance, smell and organic effect but it does not show a trace of wood; therefore it is still regarded as adulterated and not as an achievement of modern technology. The situation is similar in the case of champagne and the various wine spirits, despite the fact that Americans for the greater part of the last two decades have been drinking chemical blends instead of so-called choice liqueurs. Whether in this case the stigma of adulteration will disappear is uncertain, but on particular forms of adulteration there is general agreement. Beers which contain preservatives like salicylic acid, wines which have ether and liquors made with fusel oil are looked upon as deleterious to health.

The liquor industry in the United States as in the rest of the world is one of relatively small establishments, with the wine making plants lowest in the scale. The American Census of Manufactures of 1914 reported that in 318 wineries none employed more than 500 men and only 6 plants employed 50 workers or more. Of the 434 distilleries only 1 plant employed more than 500 men, while one fourth of the total number employed from 100 to 250 workers. Breweries, on the other hand, constituted larger units. In 1914, 3 breweries employed more than 1000 men; 9 had from 500 to 1000 men; while in all more than two thirds of the brewery workers were employed in plants with more than 50 employees. If the establishments are classified according to the value of the product, it is observed that more than two thirds of the wineries had products valued at less than \$20,000 each, while only 3 plants yielded products of more than \$1,000,000. Two fifths of the distilleries were enterprises turning out products valued at more than \$100,000 each. Of the 1250 brewing establishments 95 produced beverages worth \$1,000,-

ooo or more, while fully 60 percent of the total manufactured products were valued at \$100,000 or over.

With the exception of the manufacture of sparkling wines, the industry is no longer a handicraft one. The extent to which machinery dominates is indicated by the fact that \$100,000 of capital in 1914 employed only 8 wage earners, a figure far below the average for the manufacturing establishments of the country. The brewing of beer especially is a mechanically controlled chemical process with the yeast, the air, the water, the temperature, the rate of fermentation, the alcoholic content and the amount of albuminoid material all under direct control. This has been achieved by the utilization of air filters, temperature gauges, chemical agents, yeast cultivation and artificial refrigeration. A further step in the mechanization of beer making was effected by the introduction of automatic bottling machines, which clean, cool, fill, cork and pack the bottles in a continuous process.

Since 1899 liquor companies have grown in size, the only exceptions being the wineries. In the United States there was a decrease from 965 distilleries in 1899 to 434 in 1914. During this period the value of the products more than doubled. The number of establishments producing malt liquors was 1507 in 1899 and 1250 in 1914; over the same period the value of the products increased 87 percent. The turn of the century too produced numerous combinations in the distilled and malt liquor industries in both the United States and Europe. Of the various combinations the German groups were quite successful in establishing a centralized, stable control. Development in the United States was less positive. Here the whisky manufacturers were the first to combine, forming various pools in the 1870's and 1880's, a national monopoly in trust form in 1887 and a giant corporation in 1890. The malting companies united to create a national monopoly in the late 1890's and beer producers soon followed their example with various local combinations. This movement toward monopoly was hastened by greatly expanded production as a result of the new processes and the entry of new enterprises, cut-throat competition, the speculative fever on the stock exchanges and the activities of shrewd promoters. The result was that brewing, malting and distilling companies became involved in a network of speculative finance. But if monopoly was ever obtained, it was short lived. Independent distillers and the small malt houses were able

to undercut the prices of the combines and win away their markets. The outcome was less than happy for all but the promoters, some fortunate speculators and those specialists who reorganize corporations. The liquor industry remained one of separately owned enterprises.

The industry was more successful, however, with its trade associations. In the United States there were and in Europe today there are well organized and efficiently conducted trade associations in all branches of the liquor industry. Such groups deal with the general interests of the liquor trade; in the United States the most important activity was the protection of brewers, distillers and vintners against hostile public opinion. In order to try to stem the tide of prohibition sentiment the American associations conducted lobbies in legislative halls, organized clubs, published magazines, subverted the press, gave contributions to political organizations and attempted to boycott the products of those enterprises whose officials were known to have taken a public stand in favor of liquor regulation.

With the recent growth of the industry it was inevitable that the liquor interests should make some efforts to control the sources of retail distribution. There were a number of considerations which prompted the creation of a close union between brewers and wholesalers on the one side and the retail stores (saloons and public houses) on the other. In the first place, the size of the financial stake which the brewers in particular had in their industry called for the maintenance of a permanent retail outlet for their wares. Second, the drinking habits of the American and British populations, which had grown accustomed to drinking their beer and hard liquor in public places, demanded the establishment of a great number of conveniently located saloons. Third, the saloon keepers were usually men of small means and incapable of financing themselves. Fourth, the mounting license fees compelled saloon keepers to seek the patronage and assistance of the brewers and wholesalers. The result was the building up of a system under which the retail distributors were nominally the owners of their saloons but in which actually they acted as the agents of the larger units in the industry. In Great Britain this relationship came to be called the "tied house" system; under it, as a rule, the brewer or wholesaler advanced the saloon keeper's license fees and in exchange took a chattel mortgage on the saloon furniture and fixtures. In effect this procedure acted as a complete check on the saloon keeper, for his refusal

to handle his patron's wares or his inability to manage his house brought about the termination of the financial support accorded him.

To a very real extent both brewers and saloon keepers found the system advantageous. The brewer possessed what amounted to a proprietorship control without the attendant responsibility, and the saloon keeper was enabled to borrow a considerable part of his working capital. It has been impossible to determine, however, whether the system was ultimately of real benefit to the brewers, for on the debit side there always stood the fact that many of them had millions of dollars invested in doubtful securities. It is true that some brewers seriously questioned the whole structure of the brewery-saloon relationship and advocated its abandonment and the substitution for the prevailing method of the sale of bottled beer through grocery stores and specialty shops; but it was generally appreciated that there were insuperable obstacles in the way of such radical reorganization. Such a change would have meant not only the development of a new system of distribution but also a recasting of the drinking habits of most consumers of alcoholic beverages.

In the United States the ratification of the Eighteenth Amendment and the passage of the National Prohibition Act precipitated a crisis for which the liquor industry was little prepared. Too many of its members had lulled themselves into a false sense of security with the belief that nation wide prohibition could never become an actuality. When the blow fell in 1920, however, liquor manufacturers and dealers were compelled to choose from among a group of equally undesirable courses. They could shut down their plants in the hope of repeal or modification. They could continue to operate as illicit breweries or distilleries. They could convert their plants to other uses. They could sell their establishments to other industrial enterprises. Or, finally, they could merely salvage their machinery and other equipment. Whichever course was chosen, the entrepreneur was certain to lose heavily.

No records are available to indicate statistically how the liquor industry adjusted itself to this trying problem. The distilleries had the greatest difficulties to face, for only 25 out of the 880 such plants recorded in the 1914 tabulation of the United States Bureau of Internal Revenue had been distilling alcohol from molasses and therefore conversion into factories for the manufacture of industrial alcohol was possible only in a very few cases. Most of the distilleries in fact

either shut down or dismantled their plants completely. The breweries were a little more advantageously situated, as is evidenced by the fact that, by 1921, 667 former breweries were producing some form of non-alcoholic beverage. A number converted their plants into establishments for the manufacture of candy, cheese, syrups, cider, ice cream, vegetable oils, egg powder and condensed milk. But while there occurred instances of profitable adaptation to the requirements of prohibition, the liquor industry suffered a great financial loss, for by and large there was not a sufficient increase of consumption to absorb the additional output of the converted breweries. Nor did the American public take quickly to the so-called cereal beverages or near beer which breweries were permitted to produce.

Despite the banning by the National Prohibition Act of all alcoholic beverages except medicinal liquors and sacramental wines the American public was not to go without its alcoholic drink. The technique of bootlegging was not unfamiliar to Americans, for long before prohibition high prices in the dry territories and high licenses in the wet had made the illicit traffic commercially advantageous. This had usually taken the forms of the diversion of industrial alcohol, fictitious labeling, the refilling of original bottles, the dilution of whisky with water and alcohol and the production of synthetic drink out of flavorings, alcohol, coloring and water. It is true that during the first two years of prohibition the American liquor industry struggled against great odds and that moonshining, smuggling and seizure by stealth and violence succeeded in providing only a small commercial supply. The total amount of alcoholic beverages produced in 1921, the first year of the prohibition experiment, as estimated by Clark Warburton, was 33,000,000 gallons of spirits, 54,000,000 gallons of wine and 136,000,000 gallons of beer. The industry had begun to adjust itself by 1923, when the total estimated production reached 219,000,000 gallons of spirits, 86,000,000 gallons of wine and 250,000,000 gallons of beer. Since that year its growth was steady until it reached 124,000,000 gallons of wine in 1929 and 225,000,000 gallons of spirits and 864,000,000 gallons of beer in 1929. A comparison with production for the fiscal year 1916-17 plainly shows that except in the case of beer the amount of liquor manufactured for the American drinking public exceeded the preprohibition supply. The 1917 output was 42,723,000 gallons

of wine, 167,740,000 gallons of spirits and 1,885,071,000 gallons of beer.

Ten years after the inauguration of the prohibition era the illicit liquor industry was probably as well organized as any in the American industrial scheme. The violence and the numerous killings attending it merely grew out of the necessary absence of a recognized institutional procedure for the adjudication of disputes; but violence as such did not impede the steady flow of beer and hard liquor from producer to consumer. The size of the establishments was small but plants were numerous, as is indicated from the fact that confiscations by federal officers in a year usually amounted to more than the total of breweries and distilleries in existence before prohibition. Illicit manufacturers were able to operate with impunity great fleets of trucks, sending them over the main highways for long distances. Indeed many of the breweries were large enough to make use of the most improved technical processes, and it was claimed for some that they had reduced the cost of brewing by a sizable margin. Although originally the illicit liquor traffic had been financed with reinvested profits and the revenues of various collateral unlawful enterprises, like prostitution, commercial extortion and gambling, later capital funds attracted by the evident success and stability of the industry were derived from legitimate financial channels. It appeared that the financing of a well established operator, particularly in the beer trade, presented no real difficulties. Nor did the outlawed saloon long stand in need of a substitute. In the place of the corner saloon there sprang up a group of institutions as numerous and as conveniently located as the old retail outlets—the speakeasies, road houses, night clubs, blind pigs and beer flats of the prohibition era—which like the old saloon were assured of economic stability because in many instances they had the physical protection and financial support of the brewers and wholesalers.

It is true that there existed considerable variance in the organization of the many phases of the industry. In Chicago, for example, the production, distribution and retail sale of beer and auxiliary commodities have been under a single control, making for a rather large and complicated undertaking and therefore requiring exceptional recourse to violence. In New York City, on the other hand, the brewing of beer, its wholesale distribution and its retail sale are separately handled. There is of course an understanding between the brewers over the division

of the market, and similar agreements probably exist among the wholesalers. In the import trade on the eastern coast there is a high degree of organization. Large ships owned, it is claimed, by international syndicates bring liquor to the twelve-mile line; here it is assigned to a smuggling group operating independently and is taken by them into ports of call; finally another group takes over the supply and sells it to wholesalers for retail distribution. A fair amount of cooperation apparently exists among the various parties.

The quality of prohibition liquor probably compares not unfavorably with much of the pre-prohibition supply. The larger breweries employ modern mechanical and chemical devices, although it is not unlikely that they may hasten the period of maturing in order to increase turnover; the final product may therefore turn out to be a somewhat "rank" beer. Distilled liquors are almost wholly synthetic blends, but there is sometimes sold in the cheaper speakeasies a deleterious whisky made either of incompletely denatured alcohol, unconverted wood alcohol or alcohol in which the distillation has been inexpertly performed.

There are various types of business organization to be found in the illegal liquor traffic. Most wine and considerable beer are made at home. As for the commercial undertakings, there are companies which hold government permits to operate denaturing plants, perfume factories, patent medicine laboratories or cereal beverage works but, using their permits as a screen, actually manufacture potable alcohol. Again, there are entirely legal organizations producing non-fermented, concentrated grape juice or wort which with relatively little trouble on the part of the domestic user can be converted into wine or beer. In a third group may be placed the restaurants and clubs which sell food as an adjunct to their retail liquor business. Finally, one finds a great number of frankly illegal breweries, distilleries and saloons which operate by virtue of friendly and pecuniary intercourse with the law enforcement authorities.

The essential elements of this wide flung illegal activity are the gang and its leader. Certain numbers in each such group, possessing business and administrative capacities, constitute the executive personnel and are in charge of technical operations. Others combine the functions of the police and the military and furnish protection for the leader and the liquor ring's trucks and act as trade agents, in this capacity establishing new contacts, extending the market and

eliminating competition. The usual methods are violence and intimidation; these are often flagrantly employed, and legal apprehension and punishment of the culprits are rare.

The gang leader in place of the socially recognized ownership of ordinary business operations maintains a kind of suzerainty over his properties and personnel. Transfer of suzerain rights and their sharing and extension are brought about not by the usual commercial practises of purchase and sale but by force of arms. Nevertheless, alliances and agreements are often established by consent and are sometimes put into writing; the breaking of contracts is seriously regarded and the penalty in such cases is usually death. The functions of the gang leader are those of the higher management of big business. He formulates general policies, negotiates with gang chieftains in other localities and handles public relations matters. This last is probably his most important activity, for the security of his authority and his pecuniary success depend upon his ability to conduct his enterprise without too much molestation and to obtain the needed "protection" from political leaders and the police. Protection is attained by a variety of methods: outright payments of money are made; personal favors to politicians, such as loans of money and privileged participation in trade profits, are awarded; and control over powerful political organizations, such as district clubs and local trade unions, is sought and obtained. A successful gang leader draws upon a variety of aptitudes—indeed they are not very dissimilar from those which go to make up the socially recognized captain of industry: pecuniary shrewdness, executive force, insensitivity to the conventional tabus regarding violence and a capacity for diplomatic manoeuvring.

A. A. FRIEDRICH

See: ALCOHOL; LIQUOR TRAFFIC; PROHIBITION; RACKETEERING; GANGS; EXCISE; FOOD INDUSTRIES, section on BEVERAGE INDUSTRY.

Consult: *Standard Encyclopedia of the Alcohol Problem*, ed. by E. H. Cherrington and others, 6 vols. (Westerville, Ohio 1925-30); Ritter, Kurt, *Weinproduktion und Weinhandel der Welt vor und nach dem Kriege*, Agrarpolitische Aufsätze und Vorträge, vol. xii (Berlin 1928); Simon, A. L., *Wine and the Wine Trade* (London 1921), and *The Supply, Care and Sale of Wine* (London 1923); Arnold, J. P., *Origin and History of Beer and Brewing* (Chicago 1911); Dorchester, Daniel, *The Liquor Problem in All Ages* (New York 1884) pt. i; Moehlman, C. H., *When All Drank and Thereafter* (New York 1930); Gordon, E. B., *When the Brewer Had the Stranglehold* (New York 1930); Butler, F. H., *Wine and the Wine Lands of the World* (London

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LIQUOR TRAFFIC. Evidences of the international liquor traffic are to be found in the early histories of Egypt and Babylonia. In Greece wine soon became an important article of commerce and as early as 800 B.C. its export formed a part of the foreign trade of a number of the Greek cities. The Greek wine merchants sent their wares to such distant points as the Euxine, Scythia, Lydia, Iberia, central Asia and even to what are now the Kiev region, Silesia and Brandenburg. Under the Roman Empire the wine trade flourished: Italian wines were exported to almost all parts of the empire and the native wines of Egypt, the Euxine, Greece, north Africa, Spain and southern France were imported. Even with the decline of trade under the late empire the wine traffic did not cease entirely, for from the fifth to the eighth century Italian wines reached Russia by way of the Dnieper and the Volga rivers; also during the eighth and ninth centuries the wine and beer of Mediterranean cities were exported into northern and western Europe.

With the reversion to a local economy in the Middle Ages the liquor traffic for a time almost entirely disappeared. But by the thirteenth and fourteenth centuries shops for the sale of wine and beer were already in existence in the larger European cities, and the trade in these commodities had become so important that in Germany and England it was subjected to restrictive legislation. The growth of national states in the

fifteenth and sixteenth centuries was accompanied by a great expansion of the traffic. Wines from Spain and France, gin from Holland, beer from the German cities and ale, beer and whisky from England were important articles of commerce; naturally strong efforts were made either to identify the liquor traffic with national interest or to utilize it to strengthen other economic groups. By the Methuen Treaty between England and Portugal in 1703, for example, which was motivated by the representation of English cloth merchants that Portugal was likely to be a better market for their wares than France, Portuguese wines were admitted into English ports at a duty of £7 a tun, while French wines were compelled to pay £55 a tun; as a result the English, who had been large consumers of claret, now became drinkers of port.

The nineteenth century saw a relaxation of mercantilistic restrictions over the liquor traffic. As a result of Gladstone's great reduction of duties on wine in 1860 English consumption of continental varieties increased. About the middle of the century beer and *Brannwein* were among the leading export commodities of Germany. New markets for trade spirits were developed in the backward regions of the earth but with such devastating effect on the natives that international agreements were necessary to curtail such traffic, particularly in Africa. Toward the end of the century the consumption of alcoholic beverages greatly increased and it was not until the period following the World War that there set in a general decline, especially in the drinking of spirits.

In recent times, as the market for liquor has contracted, drink manufacturers have found themselves hard pressed to develop new outlets for their wares and liquor interests have therefore again sought the aid and protection of their governments. One of their most successful devices has been the invocation of the spirit of nationalism. The British are exhorted to drink empire rather than continental wines; in France Alsatian beer is favored at the expense of German; the Germans in turn are asked to drink their own *Sekt* instead of French champagnes; Argentineans are learning to prefer the products of their own vineyards to the once popular European wines. Nevertheless, liquor still plays an important role in the foreign trade of many European countries, particularly France, Spain and Portugal. France, the greatest wine producing country in the world, imports more wine than it exports; part of the imported wine is for

French consumption and part is blended with the finer French burgundies, clarets and the rest for export to northern European countries and Great Britain. Spanish exports of wine are large and the liquor interests have been very influential in shaping the government's foreign commercial policy. In Portugal wine making is the chief industry and accounts usually for a major share of the country's annual exports.

As a result of pressure brought to bear by the French, Spanish and Portuguese governments Iceland and Norway have been compelled to modify drastically their liquor laws. In 1921 Spain threatened a virtual embargo on Iceland's salted codfish unless the Icelandic prohibition against foreign wines was removed; the next year Iceland bowed before the demand and consented to admit Spanish wines with an alcoholic content up to 21 percent. Norway met with almost insuperable obstacles in her efforts to put into effect a national prohibition law, beginning with 1921, because of the existence of commercial treaties with France, Spain and Portugal under which Norwegian fish was to receive preferential treatment in return for similar rights accorded French, Spanish and Portuguese wines. In 1921 Norway gave way before French pressure and signed a new convention admitting French wines of less than 14 percent alcoholic content, under preferential rates, and a yearly shipment of 400,000 liters of wines and spirits of more than 14 percent alcoholic content to be used for medical, scientific and technical purposes. After prolonged negotiations similar concessions were made to Spain and Portugal, the former being allowed to ship annually 150,000 liters of heavy wine (more than 14 percent alcoholic content) and the latter 850,000 liters. In 1923 the section of the Norwegian prohibition law relating to the importation of heavy wine was repealed altogether.

Liquor smuggling on a large scale has been another problem that has arisen in recent times to vex governments seeking to maintain a rigorous policy of liquor control. The United States and the Scandinavian and Baltic countries have been notable sufferers in this respect. The extensive frontiers of the United States make it difficult to check smuggling; and while the precise amount of liquor goods illegally imported cannot of course be ascertained, the traffic must be large. It is true that the United States has gained the cooperation of a number of liquor exporting and mercantile nations, which have agreed to recognize American jurisdiction over

the liquor traffic on its bordering seas to a twelve-mile limit instead of the traditional three; also the increased and improved personnel of the American Coast Guard Service has made the landing of liquor less easy than formerly. But the National Commission on Law Observance and Enforcement (Wickersham Commission) has justly pointed out that the United States is particularly vulnerable because of her contiguity to Canada, despite Canada's law of 1930 which prohibits the declaration of withdrawals of liquor for direct exportation to her southern neighbor. Smugglers have merely shifted their bases of operations from Canadian lake and river ports to the islands of St. Pierre and Miquelon, the Bahamas, the West Indies, Mexico and Central America, all of which serve as depots for the running of Canadian whiskies into the United States. The commission's report says (*Report on the Enforcement of the Prohibition Laws of the U. S.*, p. 24-25): "In three years ending in 1929, while the reexports of whisky, all of which but a negligible few gallons had gone to the United States, had multiplied by between four and five, the amounts of Canadian whisky declared for export to the United States had remained stationary. One must, however, note the amounts declared for export to places where there was no substantial market except for smuggling into the United States. In five years ending in 1929 the declared exports of whisky from Canada to the British West Indies more than doubled, from Canada to St. Pierre and Miquelon multiplied almost by four, and to British Honduras multiplied by more than three. . . . It would be a mistake to assume that the cutting off of clearances of liquor from Canada to the United States has achieved its helpful intention. Continual increase in Canadian production, with no corresponding increase of Canadian home consumption, indicates the contrary."

In the Scandinavian and Baltic countries the smuggling of liquor presents perhaps even greater difficulties. Sweden can be reached easily by rum runners from Germany; and Denmark until 1928, when the privilege of free importation of spirits and wine was denied to all but a group of licensed firms, was at the mercy of the illicit traffic because of the fact that Copenhagen had long been a free port. A memorandum on smuggling submitted to the Finnish government in January, 1923, by the Finnish Prohibition League concentrated attention on the existing evil in the whole north European area with the result that Norway took the initiative in inviting

the cooperation of Sweden, Finland, Denmark and Germany for the creation of a common program. A conference at Oslo, held in June, 1923, was followed by a conference at Helsingfors two years later. This led to the signing of a multilateral convention in August, 1925, by Finland, Norway, Sweden, Denmark, Germany, Poland, Lithuania, Estonia, Latvia, Russia and the Free City of Danzig which sought to surround the international liquor traffic with serious restrictions. All spirits of more than 18 percent alcoholic content (in the case of Germany and of Russia the maximum was put at 22 percent) could not be exported to the signatory powers in vessels of less than one hundred tons; exports in vessels of more than one hundred tons and less than five hundred tons were to be permitted only when authorized by officials of the country of origin; every ship's master was to be required to keep a record of all shipments and present written declarations vouching for the legality of his wares; a twelve-mile limit was agreed upon for purposes of search and seizure. But smugglers found little difficulty in evading these limitations on their activities by the simple device of registering their vessels under the flags of nations not party to the Helsingfors convention.

In September, 1926, Finland, Sweden and Poland united in a request to the League of Nations for an investigation of the liquor traffic, particularly smuggling. Denmark, Belgium and Czechoslovakia soon joined the petitioning nations; the result was the reference of the subject to the Committee on Technical Organization in September, 1927, and the adoption of a plan a year later for a study of the illicit liquor traffic and the abuses growing out of alcohol consumption. Wine and beer were not to be included in the inquiry. By 1932 no definite recommendations for an international program had yet been made.

While matters arising out of the international liquor traffic have thus claimed the attention of many modern states in recent years, the problem of governmental sumptuary control over the local liquor traffic has been even more vexing and insistent; in fact in the period following the World War it has assumed the place of a major public question in almost every civilized nation in the world. Governments have instituted many devices to make possible sumptuary control, short of outright prohibition; and they have met with varied success. The most frequently occurring forms of control have been: high taxation, especially discriminatory in the case of strong

drink; high license and the limitation of the number of retail outlets (saloons or public houses); the establishment of quasi-public or limited dividend corporations for either the manufacture or the retail sale of spirituous drink or both; the creation of direct governmental agencies or government monopolies for the manufacture, importation, distribution and sale of liquor.

The employment of excise duties on liquor for the purpose of raising revenues has long been familiar in public finance policy; a tax on drink figured prominently in Alexander Hamilton's first fiscal program for the United States. Up to 1860 the American government imposed excise taxes on various forms of intoxicating liquors. During the Civil War rates were increased, and for the last two years of the struggle the average annual return accounted for 16.6 percent of the Union government's internal revenue receipts; from 1866 to 1915 the practise was continued, so that the average annual proportion of total internal revenues derived from the malt and liquor taxes ranged from 50 to 78 percent. War and post-war governments particularly have resorted to the liquor excise for revenue raising purposes. In France before the World War the excise on wine was 1.5 francs per hectoliter; by 1919 the rate had been increased to 19 francs and after being lowered somewhat during the following two years was increased in 1922 to 25 francs. By 1920 the French excise on spirits stood at 1000 francs per hectoliter. The excise on beer is 2 francs per hectoliter for each degree of alcohol. In the United Kingdom in 1913-14 the excise duty on spirits was 14/6 per proof gallon and on beer 7/9 per standard barrel; during and after the war the rates were raised so that since 1920 the spirits tax has been 72/6 per proof gallon and the beer tax 100/- per standard barrel. In 1930 the beer tax was fixed at 103/- with a rebate of 20/- under certain conditions. At the beginning of the twentieth century the United Kingdom was deriving 41.8 percent of total ordinary revenues from the liquor excise; in 1930 the proportion from the same source was 19.1 percent. It is important to note that the great increase in the English liquor excises during the post-war period was as much a conscious effort at sumptuary control as a revenue raising device, although English lawmakers also favored the principle of high license with accompanying limitation on the number of public houses.

In Denmark the government relied chiefly on the excise to bring the liquor traffic under public

control. In March, 1917, hard pressed by a decline in its foreign trade and forced to tap new revenue sources, it placed a so-called extraordinary tax on all existing stocks of spirits, the rate being made equal to the retail price at the time. During the war period the excise was raised until it stood at 20 kroner (\$5.36) per liter of spirits and 18 kroner (\$4.82) per 100 liters of beer. In 1922, determined to exercise a permanent hold on the industry in the interests of reduced consumption of strong drink, Denmark fixed the excise on spirits at 15 kroner per liter (changed in 1930 to 17 kroner) and levied direct taxes on the sales of liquor manufacturers, importers and retailers as well as on the liquor sold in restaurants, hotels and public houses. To further the governmental purpose of sumptuary control in 1923 Denmark licensed a single company to manufacture all the spirits for the country; the terms of the agreement called for a limitation of profits to 9 percent on the capital stock. The result has been a marked decline in consumption of spirits, the per capita consumption dropping from 2.18 proof gallons (United States standard) in 1913 to 0.32 proof gallons in 1929.

The licensing of the retail dispensers of liquor, i.e. the saloon keepers, was resorted to particularly in the United States and the United Kingdom. In the former the method met with only indifferent success; in the latter it has proved efficacious. Before the inauguration of national prohibition every state in the American union with the exception of Kansas and North Dakota experimented at one time or another with the licensing system. High license with only a slight attempt to supervise the saloons themselves was employed in great commonwealths like Pennsylvania, New York and Massachusetts; the usual restrictive measures called for a limitation of the number of local saloons on the basis of population, the posting of a heavy bond by proprietors, Sunday and election day closing and the prohibition of alcohol sales to minors and intoxicated persons. Low license was employed in other states and was accompanied as a rule by a more elaborate code for the regulation of the dispensing agencies. The character of the licensing authorities varied widely: in Massachusetts, except for Boston, the license commissioners were named by the mayor and aldermen of the cities and the selectmen of the towns; in Boston licensing matters were handled by the board of police commissioners appointed by the governor; in New York after the enactment of

the Raines Law of 1896 the licensing agency was a state excise commission; in Pennsylvania licenses were granted by the judges of the courts of Quarter Sessions. Despite this general preoccupation with the problem it is to be noted that the many licensing systems, whether they placed their chief reliance on high license or on elaborate regulatory codes, did not succeed in checking the growth of the saloon. Distillers and brewers found it to their interest either to subsidize saloon helpers or to advance in the form of loans the necessary sums for the payment of heavy license fees; where elected officials were in charge of the issuance of licenses, it was inevitable that the liquor industry should seek to control the local political machine or by heavy campaign contributions make it more amenable to reason.

In Great Britain, on the other hand, the licensing system, accompanied by a definite policy looking toward the reduction of the number of public houses and the restriction of hours of sale, has proved markedly successful. Thus the per capita consumption of spirits has dropped from 0.96 proof gallons (United States standard) in 1913 to 0.38 proof gallons in 1929, while the per capita consumption of beer has dropped from 33.3 gallons (United States standard) in 1913 to 19.7 gallons in 1929. The English have experimented with this mode of control for centuries; and out of a long series of codes, beginning with the licensing acts of the Tudors, there was finally evolved the act of 1904 and the Licensing Consolidation Act of 1910. The basic principle of English liquor legislation was thus put by the Earl of Balfour in 1904: "You will never get rid of the public house from this country. . . . What then should you aim at? Surely at this ideal, that the public house should be kept respectably, should be kept by respectable persons, and should be kept in such a manner as will make those who frequent it obey the law and conform to the dictates of morality" (quoted by Catlin, G. E. G., *Liquor Control*, p. 150-51).

The English scheme therefore provides for the granting of licenses by local justices of the peace, who are appointed for life by the lord chancellor; a strict supervision over the physical conditions of the licensed premises and a close examination into the financial and moral responsibility of the publicans; extinguishment of licenses in those areas where public houses seem in excess of the needs of the community; and state experiments, through the erection and operation of model public houses and even the

direct ownership of breweries, in an effort to determine how those characteristics of public drinking which are deemed socially desirable can best be conserved. The official regulations concerning conditions of sale and hours of opening of the public houses are explicit. Thus children under fourteen years may not be served at the bars; the sale of liquor to persons under eighteen years for on-premise consumption is prohibited; no sales on credit, except for off-premise consumption, are allowed; gambling in public houses is illegal. In London the hours of sale are limited to nine, between 11 a.m. and 11 p.m., with a break of at least two hours in the early afternoon, while on Sundays and certain designated holidays they are restricted to five. Outside London the hours of sale are limited to eight, between 11 a.m. and 10 p.m., with a break of two hours in the early afternoon; Sunday and holiday hours are similar to those in London.

Licenses are usually granted for a year, but the period may be extended to a maximum of seven years; after that time applications for renewal are treated as new licenses. A license originating before 1904 may not be revoked (except for cause) unless the owner is compensated out of a fund built up from a direct levy on all licensed places. That the program of eliminating unnecessary public houses has been pushed vigorously may be seen from the fact that in England and Wales alone, from 1905 to 1929, \$96,000,000 has been paid out of the compensation fund; also the ratio of public houses to population has dropped from 33.94 on-licenses per 10,000 of population in 1895 to 19.77 on-licenses per 10,000 of population in 1929. While the decrease in the number of licensed houses has been accompanied by an increase (from 6589 in 1905 to 13,526 in 1931) in that of registered clubs, many of which are organized solely for the purpose of supplying liquor to their members at all times, there has been a decided falling off in the total number of on-license places.

Australia and New Zealand have handled the liquor traffic in much the same way, that is to say, through high license and a reduction of on-license places; in the states of South Australia and Western Australia the extinguishment of liquor permits may be effected by local option. In 1923 France limited the number of places selling intoxicating beverages to that then in existence; no attempt has been made, however, to reduce the number of establishments already possessing licenses.

In Sweden the liquor traffic has been brought

under control through the creation of limited dividend corporations for the manufacture and sale of drink, the virtual rationing of the population and the prohibition of on-premise consumption except in eating places. Since 1865, when the so-called Gothenburg system was introduced, the Swedes have been experimenting with the possibility of checking the spread of the drink evil by eliminating the economic incentive in the liquor traffic. But the Gothenburg plan, operating through limited dividend corporations having local monopolies for the retail sale of brandy, was only partially successful because it did not cope with the manufacture and importation of spirituous drink and the sale of beer, wine and wine spirits.

Largely as a result of the activities of Dr. Ivan Bratt, who began in 1913 to build up a monopoly, in the public interest, of the distillation and wholesale distribution of strong drink, Sweden in 1919 radically modified the Gothenburg system and moved to eliminate private profit from every branch of the liquor industry. The Wine and Spirits Central, a limited dividend corporation financed by private capital but with its profits restricted to 7 percent annually, was invested with a national monopoly over the manufacture, importation and wholesale distribution of all spirits; some 122 independent private corporations, also of a limited dividend character and with their annual return restricted to 5 percent, were created to handle retail distribution; the state was to receive the surplus profits of the Central and the local distributing agencies.

There are two additional elements in the Swedish system of control. Spirits are sold by the bottle for off-premise consumption only; in licensed restaurants and hotels the quantity which may be sold each customer with his meal is limited. Also liquor sales to individuals for off-premise consumption are closely regulated: only possessors of pass books may purchase at the system stores. The applicant for a pass book is required to state his age, occupation and income and the size of his family and to provide convincing proof of his sobriety; if he is married and over twenty-five years of age he may purchase four liters every month. Bachelors, women and persons of small income are allowed from as much as three liters a month to as little as four liters during the course of the year. Wine and beer are sold freely, but the alcoholic content of the latter is limited to 3.2 percent by weight. Pass books are liable to cancellation if the holder is reported by the police to be a

habitual drunkard, if he has resold purchased liquor or if he has made excessively large wine purchases. As a result of this close surveillance of the nation's drinking habits the per capita consumption of spirits has declined from 1.82 proof gallons (United States standard) in 1913 to 1.24 proof gallons in 1929. Norway, after experimenting with the Gothenburg system for more than forty years and with a modified form of prohibition from 1921 to 1927, has sought to control the liquor traffic by means not unlike those adopted by Sweden; that is to say, through a national limited dividend company which has the monopoly over the manufacture, importation and wholesale distribution of spirits and a system of retail outlets, whose profits also are definitely fixed.

In Canada governmental control over the liquor traffic assumes still another form, that of monopoly over retail sales. After passing through the cycle of local option, provincial prohibition and dominion prohibition (the latter two methods were tried during the war period) the Canadian provinces have sought to cope with the problem by taking into their own hands the retail distribution of spirits. Quebec was the first to adopt the new system, in 1921; British Columbia joined in the same year, Manitoba in 1923, Alberta in 1924, Saskatchewan in 1925, Ontario and New Brunswick in 1927 and Nova Scotia in 1929; prohibition continues to exist only in Prince Edward Island and the Northwest Territories. While the form of control differs from province to province, the following characteristics are common to all of them: the manufacture of whisky, beer and wine is privately owned, but distillers, brewers and vintners are strictly supervised by provincial commissions; the retail distribution of spirits is a provincial monopoly, with provincial control boards in every case empowered to buy, sell and manage property, grant and revoke permits, hire and discharge employees and create policies; the on-premise consumption of spirits is nowhere permitted, all sales being by sealed package only. Within this frame there are of course wide variations, particularly as regards the sale of beer and wine. Beer may be bought by the bottle at government stores in all the provinces; from beer stores operated by brewers in all the provinces except Saskatchewan, New Brunswick and British Columbia; and by the glass in licensed taverns or beer parlors in Alberta, British Columbia, Manitoba and Quebec. Except in the cases of Ontario and Quebec wine can be acquired only

in the government stores and for off-premise consumption. Except in Manitoba and Saskatchewan there is no limit to the quantity of wine which may be sold a customer. Five of the provinces—Alberta, British Columbia, Manitoba, Ontario and Nova Scotia—approximate the Swedish system by requiring individual permits for the purchase of spirits; like Sweden all the provinces empower their liquor control boards to deny the purchase of liquor to habitual drunkards. The per capita consumption of spirits in Canada has decreased from 1.36 proof gallons (United States standard) in 1913 to 0.55 proof gallons in 1929.

Government monopoly for purposes of liquor control has not been unfamiliar to American history. The so-called dispensary system on local lines, under which municipal authorities had the exclusive right to dispense spirits, first made its appearance in Athens, Georgia, in 1890; and during the next twenty-five years similar agencies were functioning in a number of towns and counties in Georgia, Alabama, North Carolina, South Carolina and Virginia. In 1893 South Carolina undertook the establishment of a state wide dispensary scheme by which the state itself had a complete monopoly of the sale of alcoholic drinks. The system was operated by a board of control made up of the governor and two other persons, who purchased the liquor for the state and appointed local boards for the separate counties. The private manufacture of liquor in South Carolina was outlawed; the liquor to be dispensed was acquired in bulk, bottled and packaged and distributed among the county and city agencies for retail sale and off-premise consumption; the retail agencies on their part were strictly supervised as to hours of closing, the registration of purchasers and denial of sale to intemperate persons. Half the profits from the retail sale of spirits was to go to the county and half to the municipality. The profits from the state handling of the liquor were to be turned over to the South Carolina treasury to be used for educational purposes. In the fourteen years during which the state dispensary system was in existence the average annual return to the state was \$465,000. In 1907 decentralized county agencies were substituted for the state dispensary; in 1915 the county dispensaries were abolished and state wide prohibition was inaugurated.

A number of factors brought about the abandonment of the dispensary system in South Carolina. In the first place, it was used as a

football of politics: its offices were regularly employed to strengthen the personal machine of the governor. Secondly, the purchase of liquor at wholesale from private distillers made corruption inevitable: gratuities and rebates were accepted by dispensary officials. Finally, the high price of government liquor and the restricted hours of sale led to the appearance of a flourishing illicit liquor traffic made up of the usual bootlegging and moonshining and the operation of blind tigers and clubs.

State monopolies exist in Switzerland, Germany, Poland and Russia, although only in the case of the first named is the control of the liquor traffic the chief reason for the establishment of the monopoly. The Swiss began experimenting with a federal monopoly in 1874 and in the following period the manufacture of alcohol and liquors from potatoes, molasses, sugar and grain became an exclusive state concern; but the great growth in home distillation compelled a complete overhauling of the system in 1932. Under the new dispensation private distillers are first to be licensed and then gradually bought out; home distillation is to be taxed; the monopoly's control is extended over the manufacture, transit and sale of liquors distilled from fruit spirits; and wholesale handling is to be largely the concern of the state monopoly with legally fixed minimum and maximum prices, which may be paid the distillers. The cantons are given wide powers in handling retail sales: they may prohibit the sale of liquor for on-premise consumption; they may restrict hours of sale; they may tax hotels, restaurants and shops handling spirits. Interstate retail liquor sales, however, are placed under federal control.

Germany in 1922 created a federal monopoly over the importation, manufacture, exportation and sale of spirits. Private importation is permitted but is subject to very high taxation; all domestic manufacturing is on the basis of permits, which are used as tax devices. In 1924 Poland established a state alcohol monopoly vested with the right to buy and sell alcoholic beverages and to manufacture pure spirits. But production, as in Germany, remains a private enterprise, the distillers being taxed through licenses. Russia as early as 1894 sought to restrict the heavy drinking of vodka and at the same time to use the liquor traffic for fiscal purposes, when the retail handling of the beverage was made a government monopoly and government shops were set up for off-premise sales only. Private establishments might operate, but

they were in effect government commission houses and their numbers were limited. Distillation was in the hands of private manufacturers; rectification was performed at government plants. In 1913 one fourth of the annual state revenue came from the liquor traffic. During the World War the sale of vodka was entirely prohibited, and for a time the Soviet government made an effort to continue prohibition. But wholesale bootlegging and the appearance of a substitute vodka called samogon forced the gradual abandonment of prohibition and the establishment of a complete state monopoly in 1925. Since that time there has been an increase in the amount of vodka manufactured (although present production is well under pre-war figures) and an appreciable decline in the consumption of samogon. The significance of the part played in Soviet financing by the receipts of the vodka monopoly may be seen from the fact that revenues from this source grew from 587,000,000 rubles in 1926-27 to 1,542,000,000 rubles (13.3 percent of the total budget) in 1929-30.

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See: PROHIBITION; LIQUOR INDUSTRY; ALCOHOL; TEMPERANCE MOVEMENTS; ANTI-SALOON LEAGUE; SUMPTUARY LEGISLATION; LICENSING; EXCISE; SMUGGLING; RACKETEERING; GANGS; MONOPOLIES, PUBLIC; CONCURRENT POWERS; INTERSTATE COMMERCE.

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LIST, FRIEDRICH (1789-1846), German economist. The son of a prosperous tanner of the free town of Reutlingen, List early absorbed the doctrines of the Enlightenment and of classical economics, finding in them an excellent weapon for combating the rule of an arbitrary bureaucracy and the restrictions of the lingering guild age. Under Wangenheim's ministry he found it possible to give full scope to his liberal political ideas as adviser to the Württemberg government, as professor in the faculty of economics founded at his suggestion at the University of Tübingen and as editor of several publications. With the rising tide of the German reaction, however, his activity soon came under suspicion. What above all caused most German governments to look upon him as a demagogue was his establishment in 1819 of an association of merchants and industrialists, the so-called *Handels- und Gewerbsverein*, as well as his advocacy of the abolition of internal customs barriers. When in 1820 he was elected to the legislature and on behalf of his native town petitioned the authorities for an extension of local self-government and for publicity in judicial procedure, he was sentenced to ten months' imprisonment for attempting to undermine the stability of public institutions. List fled abroad and led a wandering life for several years. In 1824 he returned to his native country, where he was promptly arrested; released upon a promise to emigrate to America, he sailed in 1825 for New York.

In the United States List engaged in various activities; he was a farmer, an editor of a German newspaper at Reading, Pennsylvania, a successful mine and railroad promoter and a keen student of the economic and political problems which beset the growing country. His experiences served to confirm the doubts which he had begun to entertain in Europe concerning the tenableness of Adam Smith's doctrines, and he concluded now that a protective tariff was indispensable to industrially undeveloped countries. At the suggestion of Charles Ingersoll, vice president of the Pennsylvania Society for the Promotion of Manufactures and the Mechanic Arts—the rallying point of the protectionist elements of the time—List prepared the *Outlines of Amer-*

ican *Political Economy* (Philadelphia 1827), his first attempt at a systematic formulation of his views.

Appointed United States consul in 1832, List returned to Germany and embarked upon an ambitious plan to organize a German railway system, a venture which although successful in itself proved a source of personal disappointment and even forced him to leave Germany for France. A prize offered by the French Academy in 1838 gave him an opportunity to rework his theoretical system and to give it a historical basis. The studies and experiences of these years he embodied in his best known work, *Das nationale System der politischen Oekonomie* (Stuttgart 1841; tr. by S. S. Lloyd, London 1885), appearing after he had settled permanently in Germany. Beginning with 1843 he published *Das Zollvereinsblatt*, devoted to the dissemination of his views, which were now supported by rising industrialism and respected by men like Metternich, Peel and Palmerston and began to exercise a decisive influence in molding public opinion in Germany. Material worries, however, combined with the opposition to his plan to establish an alliance between Germany and Great Britain hastened his self-inflicted death.

With the exception of Karl Marx no other economist has emphasized so strongly as List the close interrelation of the theoretical economic viewpoint and political factors. Economic doctrines had no abstract validity for him; he always examined accepted views and developed his own ideas in terms of concrete political areas at definite levels of economic development. He severely criticized the classical writers for failing to recognize the significance of the nation as the most important link between the individual and mankind. He saw the logical expression of the industrial and commercial supremacy of England in the economic principles of the classical school and deemed them unsuited to the needs of rising countries like Germany and the United States. The object of his writings accordingly was to present a theoretical system which should express the interests of countries occupying second or third rank but possessing the potentialities of first class nations.

Departing from the individualistic-cosmopolitan classical economics, which in its centering of economics around the theory of value revealed to List its atomistic-materialistic orientation, he made the concept of productive forces the core of his organic doctrine. Accordingly he opposed to the classical emphasis on division of labor his

emphasis on the cooperative aspects of the productive process in society. His dynamic approach and his interest in the development of the productive forces led him to champion the protective tariff as a means of furthering the exploitation of undeveloped resources and of enabling backward states to rise to the rank of a *Normalnation*. The road to normal nationhood was pointed out in his theory of economic stages. The first state to emerge from primitive conditions was the agricultural, followed by an agricultural and manufacturing state, which in turn culminated in the agricultural manufacturing and commercial state based on the complete utilization of productive forces. Once normal nationhood is reached, the educational function of the tariff will have ceased and free trade will prevail.

Both for his emphasis on the reality of the nation and for his advocacy of the protective tariff List is generally considered as the spiritual father of the Zollverein. He was also hailed as the prophet of advanced capitalism. The latter estimate is, however, only partially justified. For although he consistently urged the development of industrial resources and of the new means of transportation he believed that it was the duty of the state to regulate economic life as well as to curb individualism, and the subsequent over-industrialization would have seemed to him a distorted image of his ideal of a *Normalnation*.

EDGAR SALIN

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LISTER, FIRST BARON, JOSEPH (1827-1912), English surgeon. After graduating in medicine from the University of London in 1852 Lister

went to Edinburgh to study surgery under James Syme. He became professor of surgery in the University of Glasgow in 1860, succeeded Syme at Edinburgh in 1869 and from 1877 to 1892 held the chair of surgery at King's College, London. Ignorant of the work of I. P. Semmelweis and O. W. Holmes on the prevention of puerperal fever and of Jules Lemaire's prior recommendation of carbolic acid as a chemical antiseptic, Lister, under the influence of Pasteur, after two years of experimentation on means of preventing suppuration in wounds published in 1867 his important papers (in *Lancet*, vol. ii (1867) p. 95-96, 353-56, 668-69), one of which was entitled "On the Antiseptic Principle in the Practise of Surgery." The intense and protracted antagonism to his innovation was due largely to the current ignorance of the germ theory, to the failure of other surgeons to attain similar efficacious results by the use of his methods and to rival techniques proposed by other contemporary authorities. Lister's erroneous insistence on the need for the antiseptic spray machine to create an antiseptic atmosphere surrounding the wound justified criticism and did much to delay the endorsement of his meritorious work, which, however, brought him international fame during his lifetime. Although the substitution of general asepsis for antisepsis in hospital practise was a direct development of his theory, Lister deplored the complicated and expensive precautions which it involved and persisted in his belief that the antiseptic method offered sufficient protection. Antisepsis remains an important aspect of surgical practise in military field hospitals, where it is difficult to achieve general asepsis.

BERNHARD J. STERN

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LISZT, FRANZ EDUARD VON (1851-1919), German jurist. Liszt was born in Vienna, the son of Eduard von Liszt, who later became general procurator. He made his career, however, in German universities; he was successively professor at Giessen, Marburg, Halle and Berlin.

Liszt achieved great fame as the leader of the sociological school of criminal law in Germany.

A Deutsches Reichs-Pressrecht (Berlin 1880) was followed by the first edition of the fundamental *Lehrbuch des deutschen Strafrechts* (Berlin 1881; 25th ed. by Eberhard Schmidt, 1927) and the founding in the same year of the *Zeitschrift für die gesamte Strafrechtswissenschaft*. In 1889 Liszt together with the Belgian Prins and the Hollander van Hamel founded the Internationale Kriminalistische Vereinigung (I.K.V.) in order to promote international activity in the investigation of the causes and the methods of control of crime. To serve the same purpose he later edited the *Strafgesetzbuch der Gegenwart in Rechtsvergleichender Darstellung* (2 vols., Berlin 1894-99), the first German exposition of the criminal law of all civilized peoples; this was the forerunner of the monumental *Vergleichende Darstellung des deutschen und ausländischen Strafrechts* (16 vols., Berlin 1905-09), in which Liszt was also a specially important collaborator. Liszt ventured too into the field of international law. Indeed his *Das Völkerrecht, systematisch dargestellt* (Berlin 1898; 12th ed. by Max Fleischmann, 1925) is a standard work on the subject.

Liszt was the initiator and champion of modern criminal law reform far beyond the borders of Germany. As the leading teacher of criminal law he gathered about him a large circle of pupils, many of whom now teach in Germany and elsewhere. In the criminological controversy of his time Liszt appeared as the advocate of clear sighted special prevention and as an extreme opponent of retaliation. He directed his attack toward the criminal himself: not the deed but the doer was to be punished. Among the many campaigns for specific reforms upon which he embarked may be mentioned his largely successful attack upon short term imprisonment.

ROBERT VON HIPPEL

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LITERACY AND ILLITERACY. The term literacy may relate either to a society or to the general mass of individuals within a society, according to whether its implied antithesis is preliteracy or illiteracy. In the first sense, a society becomes literate as soon as some group or caste within it begins to make written records.

In the second sense literacy denotes a condition which, with the possible exception of a few isolated instances such as the post-Diaspora Jews, has never acquired a normative value until the modern era. The analysis of literacy in ancient and mediaeval peoples must content itself with establishing the vocational and social groups in possession of writing and with speculating upon the factors tending toward its more general diffusion. A wide range of variation is revealed. Between the first introduction of writing among the oriental peoples probably in the fourth millennium B.C. and the decline of the Roman Empire, an imposing superstructure of learning, literature, science and philosophy had been erected upon the basis of literacy; but in the eyes of the cultivated classes literacy itself represented only the most elementary form of initiation. In any society developed beyond the stage where the ability to write is a sign of magical powers or an emblem of exclusiveness, literacy, once acquired, tends to assume the aspect of a faculty akin to sight and hearing and attention shifts to the objects upon which it is to be trained. The crucial problem, therefore, is to isolate the drives which in all civilizations have stimulated certain individuals to seek literacy and which in the modern period have impelled rulers and institutions to prescribe it.

Literacy, or what the ancients called the knowledge of letters, designates the ability to communicate through the medium of the abstract symbols of a script. Within such a definition there is room for a wide variety of emphases and interpretations. The Mohammedan peoples have in all ages tended to consider a person literate if he could merely read, while the ancient Egyptians, who worshiped their elaborate hieroglyphics as works of art, placed stress upon the capacity to write. Among all literate peoples prior to the invention of printing an important distinction existed between persons conversant with the calligraphic script, which was used for books, and those who knew only the cursive hand, which served for the ordinary purposes of business and social intercourse. Again it has been definitely shown that in the fifteenth and sixteenth centuries persons who could write were far outnumbered by those able to read. In particular it was long considered proper for women of refinement to be able to read books of devotion or romance as well as matters pertaining to household affairs but both unnecessary and ungenteel for them to write. For all

people during the first three centuries following the invention of printing the compulsion for reading was distinct from that for writing. These varied interpretations are reflected today in the diversity of standards employed by different governments in collecting statistics on literacy. A realistic note has been struck in recent years in certain attempts to differentiate between literates and semiliterates, between effective and formal literates.

The development of the first systems of writing involved a process of conventionalizing pictographs, which are everywhere prevalent among primitive peoples, into an ideographic or semi-ideographic code. Wherever this took place, whether in Chaldea, Egypt, China, Crete or in a modified form among the Aztecs and the Mayas, it was accomplished by the presiding authorities of a highly centralized, relatively stable social and political organization; that is, by a royal or a priestly caste or through the cooperation of the two. The first uses made of writing are in line with its origins. The priests of Egypt and Babylonia inscribed on stone or clay the precepts of their religion; the kings of the same countries and of Crete, with an eye to their reputation with posterity, had the annals of their reigns published, sometimes on the flagstones which paved the palace temples, as in Babylonia, sometimes on their tombs, as in Egypt and Minoa. The business of the political bureaucracies early came to be transacted in writing: tax lists were drawn up; treaties were made; official correspondence was carried on—such correspondence as has been preserved in the Tel el Amarna letters of the fourteenth century B.C. The more complex the political and legal structure, the more the written documents multiplied: during the period when the whole Egyptian Empire was regarded as one vast economic organization under the administration of the court, an enormous number of people were required to keep the official accounts. These writers, whose stock in trade is analogous to that of the typist in modern society, although they sometimes functioned also as notaries, were the forerunners of the scribes of the Roman and mediaeval chanceries.

That the Egyptian aristocracy as well as the professional scribes was able to read and write is attested by the long prevailing custom of including among the burial objects papyrus rolls, by means of which the departed noble was to make manifest to Thoth, the god of writing, a command of the written word. But with the

growing commercial intercommunication during the second millennium B.C. the extension of literacy was the work primarily of the trading classes. The contracts signed by Babylonian traders as far back as the third millennium may be regarded as the prototypes of those numerous commercial documents which are to be found covering the centuries from 2000 to 1000 B.C., when Babylonian was the *lingua franca* through which merchants speaking varied languages communicated and made their written transactions. The final perfection of the proto-Phoenician alphabet around 1000 B.C. greatly facilitated written transactions and the keeping of commercial records, and during the period following the substitution of Aramaic for Babylonian as the international commercial language of the eastern Mediterranean the alphabet was transplanted to various cultures, such as the Greek, the Roman, the Arabic and the Indian, and in the process of adaptation to the needs of the different languages was gradually rendered more expressive. In a thriving commercial state such as fourth century Athens, the metics of the Piraeus, preoccupied with the practical demands of trade and shipping, used their literacy as a day to day tool, in a sense quite different from the more cultured citizen, who tended to regard literacy as the initial step toward a rather elaborate mental and spiritual culture. A similar utilitarian attitude toward literacy was manifested in a more ponderable fashion by the Korean shopkeepers and merchants of a later age, who adopted the easily written phonetic alphabet, while the scholars and government officials continued to struggle with the complex Chinese characters. In India at the present time the castes composed of merchants as well as of professional people reveal a higher rate of literacy than many of those above them in the social scale.

The first unmistakable evidence of a widespread popular literacy is in Ptolemaic Alexandria, although there is good reason to believe that the citizenry of Athens could in general read and write. From an analysis of various types of legal contracts it has been estimated that of the middle class populace of Alexandria 60 percent of the men and 40 percent of the women wrote Greek; to these must be added the considerable number of Alexandrians who wrote only Egyptian, which had been rendered less exclusive by the gradual modification of the cumbersome if beautiful hieroglyphs and the development, probably about 800 B.C., of the

cursive demotic script. An extensive reading public, a phenomenon which first emerged along with the commercial book trade in fifth century Athens, is indicated by the publication at Alexandria of large editions of chapbooks, *feuilletons* and allied types of popular literature. With the vulgarization of literacy in Athens and Alexandria the aura of magic which had continued even as late as the Homeric age to surround the written word was gradually dissipated. The increase in the size of the reading public was made possible by improvements in the technique of manufacturing papyrus, which could be manifolded far more easily than the clay materials of the Babylonians or the waxed tablets and potsherds still largely used in classical Greece for letters and accounts. Despite the technological improvements, however, the high cost of papyrus prevented its general use, while the parchment, which from the second century on gradually replaced it, was still more expensive.

The high percentage of literacy in such cultured urban centers as Athens and Alexandria cannot be taken as typical of classical antiquity as a whole. In the broad rural areas the mechanisms of oral transmission—the direct appeal to the eye and the ear—which characterize the preliterate tribal stage, were still operative with only minor modifications. The carpenter of Bethlehem, desirous of drawing to himself the fishermen of Judaea, traveled to them afoot and spoke to them as they drew in their nets. Even in the urban centers the fact that a large percentage of the people could read and write does not presuppose a premium upon literacy. Although Aristophanes derided the illiterate person as one devoid of the barest rudiments of culture, there is no indication that the ancient state, and little that the philosophers in their utopias, felt sufficient concern over the further extension of literacy to recommend official action.

This attitude of indifference is made explicit by Cicero: the general populace, if it should be so impelled by its daily needs, might become literate, but it was no concern of the aristocratic public servant steeped in Greek culture. That the Roman populace was so impelled may be inferred not only from the profusion of reading and writing schools (*ludi*), which supplemented the family system of instruction, but also from the extreme dependence of Roman civilization on general familiarity with the written word. A similar dependence in Athens may be revealed by future archaeological discoveries, which have already shown that Athenian laws

were proclaimed in writing, as had been the Code of Hammurabi in Babylonia; but the case of Rome is less conjectural. Not only were laws, treaties, decrees of senators and magistrates commonly published on stone, bronze or wooden slabs, but military orders were communicated in writing; soldiers wore armor or carried leaden sling bolts inscribed with letters; tiles used by the military forces in building their quarters were stamped with the name of the cohort; pottery makers cut their names upon their wares; announcements of official candidatures were painted on walls, as were advertisements of gladiatorial games and even of runaway animals; tokens (*tesserae*) for admission to public banquets and for the dole of grain bore the names and addresses of their holders; calendars and almanacs were prepared for the use of the farmers. At the beginning of the fourth century A.D. there were about thirty public libraries in Rome and several in the provinces. Among later emperors, such as Trajan, Alexander Severus and Diocletian, there is scattered evidence of an awakening sense of the advantages which might accrue to the state from a literate populace; but lacking any underlying theory, such sporadic attempts at dissemination of literacy may be regarded only as tenuous adumbrations of a still distant age.

The conditions of literacy in the Middle Ages are explicable in terms of the disintegration of the old Roman Empire and the simultaneous emergence of the Christian church as the civilizing agent of the western world. The body of sacred literature on which Christian dogma was built became the monopoly of the religious hierarchy; what the unordained man needed to know could be transmitted to him orally through the local priest. But the value of literacy for the hierarchy itself became increasingly apparent with the efforts of the church to imitate the administrative system of its imperial prototype. Moreover the molders of western monasticism, such as Benedict and Cassiodorus, not entirely liberated from the cultural standards of the Roman upper classes, incorporated the copying of manuscripts into the monastic routine. The scriptorium, with its patient scribe, became a common feature of every Benedictine as of every Irish monastery.

The cessation of economic intercourse and the transition to feudal anarchy during the early Middle Ages rendered obsolete important functions previously performed by literacy. Until the eighth century some commerce continued to be

carried on through the agency of Jews, Italians and Levantines; but after the closing of the Roman lake by the advance of the Arabs the literate account keeping merchant class disappeared and towns, at least north of the Alps, were virtually erased. The producer-trader of the Dark Ages who carried his goods a few miles to a primitive market place, where he haggled with other producer-traders, had no more need of the art of reading and writing than the inhabitants of the self-sufficient manor. The larger landowners and the more important lords and princes employed members of the clergy as notaries and scribes to keep their simple records. Until the crusades messages from one feudal lord to another were commonly conveyed by deputies who communicated them by word of mouth. The ambitious Charlemagne with his vast empire had exceptional reasons to regret his illiteracy; the Holy Roman emperor Henry IV seemed so remarkable to his contemporaries that they specifically recorded his ability to read a letter, "from whomsoever it had been sent." But for most lay potentates illiteracy involved little inconvenience. On the other hand, the idea of some cultural or spiritual initiation into the functions of the noble class was old in the feudal tradition; and as the relations of church and nobility became more closely knit, it was natural that the initiation might come to resemble clerical education. There is evidence that in the eleventh and twelfth centuries a great part of the nobility had acquired the elements of reading and writing Latin either at the monastic or cathedral schools, which existed for the education of churchmen, or from clerks resident on their estates. Isolated documents have sometimes been advanced to prove occasional mediaeval efforts to extend literacy to the masses: when analyzed, they usually signify only a renewed and unsuccessful attempt to exterminate illiteracy among the clergy, as in the case of Charlemagne's decree of 789, or an injunction to parish priests to teach their lambs to be good Christians—a discipline for which literacy was no prerequisite.

Italy, less clericalized than northern Europe, had managed, if less successfully than mediaeval Byzantium, to keep alive the ancient ideas of culture. With the rise of the universities of Bologna and Salerno there gradually spread throughout Europe an impulse which revived the legal and medical professions in their ancient form; the result was to extend the sphere of earthly functions which were felt to be rooted in a body

of written literature. A development still more far reaching in its consequences also appeared for the first time in Italy: as trade began to revive in the wake of the crusades and a new mercantile class evolved, the advantages of literacy for business purposes became once more apparent. It is probable that the Florentine merchant learned to read and write as early as the eleventh century. Two centuries later the Hanseatic merchants discovered the possibilities of the same instrument. These enterprising merchants who wished to emancipate themselves from the employment of priestly scribes were in fact pioneers in the struggle to separate educational facilities from church control. At first they apparently sought to gain entrance into the cathedral, monastic or parish schools; at a more advanced stage they brought about the foundation of municipal schools, which multiplied particularly in Germany, Holland and Denmark from the fourteenth century onward. Soon they found themselves in need of subordinates to keep their accounts and write their letters, and it became advantageous for lower strata to attend the reading and writing schools. Eventually they freed themselves not only from the priest but from the Latin tongue. From the fourteenth century on municipal and state documents as well as mercantile account books are written in the vernacular. Once the latter was conceived as a possible medium for writing as well as for speech, literacy lost much of its mystery as well as much of its difficulty. A Frankfort locksmiths' *Gesellenbuch* and numerous documents in municipal archives show that German artisans were not uncommonly able to write as early as 1400; and there is evidence that English artisans not only could write but were expected by their masters to do so. While Thomas More's estimate that "not three fifths of the English people" could read in his day was certainly not based on unimpeachable statistics, it is obvious that the dame, grammar, guild and charity schools were imparting a considerable degree of literacy. The regulations with regard to benefit of clergy indicate the same development. In England after 1351 the ability to read had entitled an individual to the privilege; when in 1489 the English government drew a distinction between members of the clergy and other literates, it appears to have been reacting against abuses resulting from the growth of literacy. Undoubtedly the late Middle Ages already reveal that tendency to use reading and writing as a tool which was to increase concomitantly with the progressive complexity of bus-

iness relationships and commercial intercourse.

To a certain degree all modern thought and activity with regard to literacy have been conditioned by the inventions of printing and of cheap paper, which made possible the slow transformation of western civilization into what Spengler has called a *Buch-und-Lesen Kultur*. Reading could never have become a common activity of the general public so long as the only book material remained the rare and expensive parchment and the only method of transmission the hand of the copyist. The careless, sometimes illegible cursive hand which in the fifteenth century rapidly replaced the Carolingian minuscules in itself reflects the inadequacy of the old mechanism of bookmaking, even for the restricted upper class circles who could afford books and had leisure to cultivate reading as an accomplishment. While it was on the whole to the learned and leisure classes that the religious literature, the romances and the humanistic writings composing the bulk of the incunabula were addressed, the inventions furnished the technical prerequisites for the genesis of an unlimited reading public, once conditions should impel the masses to learn to read.

The revolution which the emergence of these conditions constituted has been created by the coalescence of two factors: the shifting of emphasis to the common man, either because his interests were considered significant in themselves or because of his importance as a unit in a collectivity; and the increased stress on the written word as a medium of communication. These pressures were brought to bear by the Reformation. Precisely because it was a revolt against the authority vested in the institutional church the Reformation implied the invocation of a higher authority. In calling upon the Bible Luther took a course not unprecedented in the annals of heretical or semiheretical movements. The Waldensians, the Wycliffites, the Hussites, had likewise appealed from the personal to what the Jesuits contemptuously called the "paper" pope. Wycliffe and the followers of Huss had rendered the Bible into the English and the Czech vernaculars respectively; it had even been translated into German before Luther's time. The innovating force of the Reformation consisted in the extent to which Luther popularized the conception of the direct communion of all men with the divine through the written word.

To what extent the Reformation led in fact to the immediate extension of literacy is obscured in the mists of prestatistical times. It is

certain that it played the leading role in turning the printing press to the production of literature significant to the general public. Besides numerous editions of Bible translations in German, English, French, Swedish and Dutch the Reformation introduced an enormous supply of catechetical literature written in simple, easy language. It transferred the terrain of theological controversy from the learned tractate to the popular pamphlet. In the case of Germany it created the modern written language out of the speech of the market place and the peasant. Between 1516 and 1524 the number of presses printing in the German tongue increased ninefold; and before 1525 two thousand printings of Luther's writings alone had appeared. But the fact that the reformers at the very beginning of the warfare turned to the vernacular only serves to prove the previous existence of a wider sphere of literacy in the native than in the Latin tongue; as early as 1520 Hutten explicitly advanced this explanation for his abandonment of Latin. Perhaps the public addressed by the early reformers consisted in no small part of that merchant and industrial class which had already discovered the value of literacy for economic operations. Moreover in view of the generally demonstrated disinclination of the masses to seek literacy of their own volition at an appreciable cost of effort, any momentous change had to wait upon the organization of pressure from above as well as upon the creation of adequate schooling facilities. While Luther is generally considered the father of the German *Volksschule*, there is evidence that he, and certainly that Melancthon, divided between religious compulsion and the humanistic predispositions of the time, were interested primarily in secondary education. The decrees concerning popular education issued in the reformed German states during Luther's lifetime are remarkable for their sparing references to reading and writing. It was not until 1559 that a prince of Württemberg evinced a conviction that oral transmission was inadequate by insisting that reading and writing be taught and not until 1642 that such a function, from being a moral and religious duty, was transformed by a duke of Saxe-Coburg-Gotha into a political obligation.

But however tardily it may have become operative, the Reformation has been throughout the modern era a pervasive force in the propagation of literacy. The vitality of this force even today is demonstrated by the work of Protestant

missions in diffusing the Bible, now translated into four hundred different languages, among the unlettered peoples of Asia and Africa. Periodically recharged by pietistic awakenings or by the formation of new sects, the original impulse produced manifold movements in the seventeenth and eighteenth centuries for the eradication of the barriers between the common man and the fount of authority. In the Scandinavian peninsula, Denmark and Holland it constituted either the sole or the primary inspiration for the systems of parish and municipal schools which, even before the nineteenth century educational laws, made literacy a typical phenomenon among the natives of these countries. In England the first movement was organized in 1701 by the Society for Promoting Christian Knowledge, which "being touched with zeal for the honor of God and the salvation of the souls of the poor" founded charity schools to teach reading and writing. By the middle of the century, when the society was instructing about 50,000 children, the Wesleyans had begun to found schools; and from 1785 on the great Sunday school movement, initiated by Robert Raikes, taught reading and writing along with Methodist or Anglican religious principles. In Scotland the relation between the Sunday schools and the literacy of the poor cotter, who in Burns' poem "reads the Sacred Word," is direct. Humanitarian as well as religious teacher, Wesley wrote, edited and published a veritable library of literature suitable for popular consumption and including books of poetry, travel, etiquette, domestic economy, health and hygiene. The entire Wesleyan organization was converted into a gigantic book agency for the distribution of this literature, achieving such success that, according to one apologist, no Methodist home, however humble, lacked a Bible, a hymn book and the *Methodist Magazine*.

In most of the countries unaffected by the Reformation the mediaeval attitude toward literacy underwent relatively slight modification. The principal teaching order of the Counter-Reformation, the Jesuits, convinced that the Catholic hold on the masses was to be retained or recaptured only through the mediation of those in influential position, concerned itself almost entirely with the upper classes. Under the stimulus of competition in Germany, it is true, Canisius matched Luther's catechism with a Catholic document equally popular and some of the Catholic states made timid overtures toward the creation of schools. But no wide-

spread or successful attempt to disseminate literacy among the masses emanated from Catholic influence in any country prior to the nineteenth century, with the important exception of France. There a Catholic philanthropic movement, first manifested in the creation of teaching orders for the elementary education of girls, culminated in 1684 in the establishment by Jean Baptiste de la Salle of the Institute of the Brothers of the Christian Schools, which at its suppression in 1792 was instructing 36,000 pupils in reading, writing and the catechism. No doubt this order and similar agencies had some part in the growth of literacy in France during the eighteenth century; an audacious estimate of this growth, based on an analysis of marriage registers, indicates a rise from 29.06 percent for men and 13.97 percent for women in the years from 1686 to 1690 to 47.05 percent and 26.87 percent respectively between 1786 and 1790.

Probably, however, in France as in England and Germany the most notable extension of literacy in the early centuries of the modern era took place among the middle classes and was at first associated with the capitalistic revolution, the development of foreign trade, the improvement in systems of accounting and the repeated verification of the causative connection between pertinent information and economic rewards. Along with this process came a new stratification of literacy as well as of economic and social position. Since a favorable balance of trade in the mercantilistic state was thought to depend largely upon the supply of cheap labor, the entrenched interests discountenanced the teaching of reading and writing to the working classes, who might be lured by these instruments away from servile tasks and docile attitudes. Those who had attended a charity school or one of the fee charging reading and writing schools, such as the *deutsche Schulen* in Germany, the dame and grammar schools in England and colonial America or the writing schools in the cities of France, might "contemn," as an English writer said in 1763, "those drudgeries for which they were born." Not essentially altered when removed from the mercantilistic framework, this argument became perhaps the most important obstacle to the general dissemination of literacy. In its extreme form it inspired South Carolina in 1724 and several other colonies or states during the next hundred years to impose severe penalties for teaching the Negro to read and write.

It was in this climate that the apotheosis of

the diffusion of knowledge accompanying the popularization of natural rights philosophy was introduced. The "reading habit" was enormously expanded during the eighteenth century but, with a few exceptions, hardly beyond the limits of the middle classes. To their interests and predilections were addressed the new types of reading matter, the periodical, the daily newspaper, the novel, the libraries "devoted to things useful to mankind." The organized efforts of the English commercial booksellers to inculcate the reading habit were confined to the classes who could buy their wares and who had reason to hope for cultural or political improvement from perusing them. The stereotype of the "well informed man" appeared and deviation from it became stigmatized as a social delinquency, but the man was the bourgeois.

Despite the circumscribed limits of its immediate effect, however, the natural rights philosophy advanced the first elements of the ideology upon which the modern movement for the general dissemination of literacy has been based. Elevating the reasonable action and the earthly perfection of the individual to a height no less empyrean than Luther's ideal of religious salvation, it indicated a path to this goal scarcely more difficult than the reading of the Bible. In order to be saved from error man had only to read and know—a thesis succinctly expressed in Thomasius' *Einleitung in die Vernunftlehre* (first published in Latin in 1688), "wherein is pointed out, in an easy manner, comprehensible to all reasonable persons, no matter of what class or sex, the method of distinguishing between what is true, probable and false." Individual differences, inherited traits, counted for little or with Helvétius for nothing since external stimuli were all important in human development. While Voltaire, subscribing in general to this philosophy, might declare that it did not apply to the laborers on his estate, it inevitably focused attention upon the literacy of the masses, once it was fused with the idea that the relation of the common man to society was something besides economic. A temporary fusion was accomplished prior to the French Revolution, in the enlightened despotisms of Catherine II, Maria Theresa and Frederick the Great, although in the case of the last two religious and other considerations were heavily alloyed with enlightenment. But the revolution came with the advent of democracy.

While a long chronological gap intervenes between doctrine and fact because of the vicissi-

tudinous career of democracy itself, most of the important reasons for making general literacy a concern of the democratic state were crudely formulated by Condorcet, the most zealous advocate of popular instruction of the French Revolution. Drawing the implications of the democratic gospel of equal opportunity he showed, to use the words of Kant, that it was a "sin against the dignity of man, against humanity itself," to withhold from any individual the necessary tools for his own development. The second assumption which propelled the nineteenth century movement for compulsory literacy was associated with the transformation of the passive subject of monarchy into the active citizen of democracy: freedom from superstition, delusion, imposture and the disturbances of human passion—all to be attained through the diffusion of knowledge—became a condition of civic competence. Popular instruction became the conventional anodyne offered by democratic dogma for both the fears of the interests and the suspicions of the people. The argument for literacy gained strength with each additional movement or program to extend the suffrage; and it is significant that the utilitarians, the first loud advocates of universal suffrage in England, carried on a fervent campaign for the establishment of reading and writing schools. James Mill summarized the case by declaring that if a reading public were created in any part of the world, "the prejudices on which misrule supports itself would gradually and silently disappear."

The logic of democracy as expounded in England, America and France by the utilitarians, Price, Paine, Whitbread, Robert Coram, Benjamin Rush, Noah Webster, Nathaniel Chipman, Condorcet and Cermenin merged with the response of humanitarianism to the conditions produced by the industrial revolution. Urbanization, the deracination of peoples, the long hours attending the factory system, the absence of holidays, which had recurred at such frequent intervals in the mediaeval and early modern economies, and the division of labor, which, as Adam Smith pointed out, had obliterated the cultural value of daily work, had isolated the working classes from their traditional pleasures and vehicles of instruction. Some humanitarians, like Lancaster and Bell, whose monitorial systems provided a technique for mass production of literacy, the Anglican National Society (founded 1811) and the British and Foreign School Society (founded 1814) solved the problem by inculcating Bible reading. Others seeking to create a sub-

stitute for the pageants and spectacles of the village community wrote fiction for working class consumption. Brougham, the pupil of James Mill, attempted to apply the nostrum of the philosophers, the diffusion of knowledge. The net result was the appearance between 1810 and 1830 of enormous quantities of new reading matter modeled on the literature previously created for the bourgeoisie but reduced to a cheaper, more popular level. As the old regime had produced the *Mercure de France*, 1836 produced Girardin's *Presse*; Brougham's *Penny Magazine* of 1832 was the counterpart of the *Gentleman's Magazine* of 1731. That the masses themselves were becoming increasingly convinced of the value of reading is indicated by the extensive sales of the new literature.

Brougham is the typical representative of the point of view which finally overcame the opposition of the traditionalists and the economic interests and impelled the liberal state to assume the burden of promoting literacy through popular education. Addressing himself to the middle classes while organizing the instruction of the poor he sought to show the correlation between ignorance and discontent. When at the beginning of the eighteenth century the founders of the charity schools had defended Bible reading against the mercantilists and the Mandevilles as a method of preventing crime, their argument had carried little weight because the working classes, whether criminal or not, were still essentially economic robots. But rationalism and utilitarianism impinged upon the social consciousness in an era of popular tumult, riots and machine smashings. For these aberrations they presented both a diagnosis and a cure. Brougham himself, Hannah More and numerous other writers of popular tracts gave concrete evidence of the possibility of using the printed word to serve the interests of conservatism. Even so the forces of tradition were difficult to subdue. In 1802 a law was passed requiring that poor children "apprenticed" to factories be taught to read and write; select committees of the House of Commons from 1816 on revealed a "shocking degree" of illiteracy among the lower orders. But only the cumulative effects of mob turbulence and the new sources of terror arising from the extension of the franchise finally forced the interests to promote education as a means of teaching the working classes to "govern and repress their passions." The important advances in English elementary education during the nineteenth century came in 1833, one year

after the first Reform Bill, and in 1870, three years after the second extension of the franchise. The first official attempt to collect statistics on illiteracy was made in 1839, the year of the Chartist riots.

The forces affecting the growth of literacy in Europe had as a natural result of the transplantation of peoples and of cultures operated in modified form also in colonial America. Wherever a community of Dutch Reformed people settled or of Lutherans or of the German Reformed church or of New England Puritans or of Presbyterian Scotch-Irish, the influence of the church was exerted in spreading literacy; in colonial Massachusetts, Connecticut and New Hampshire public provision was made for vernacular schools, wherein the populace was initiated into the *New England Primer*, that abridged vehicle of Calvinistic orthodoxy which "taught millions to read and not one to sin." Agitation for general enlightenment of the masses began in the eighteenth century in the pamphlets of the radical democrats; but the resistance of the propertied interests combined with the influence of the frontier delayed determined consideration of the problem until after the first quarter of the nineteenth century. Following the introduction of universal suffrage in 1828, however, when the propertied classes were more susceptible to any proposal that promised to safeguard political stability, the democratic and humanitarian propagandists succeeded in popularizing the ideal of universal elementary education and ultimately in effecting the establishment of free, compulsory primary schools throughout the greater part of the country.

The first American statistics on illiteracy were collected by the census of 1840, one year after the English estimate, which had been based on the number of persons unable to sign the marriage register; in the outburst of liberal sentiment which culminated in the July revolution and produced the elementary education law of 1833 the French minister of Public Instruction had published as early as 1827 data derived both from the marriage register and from figures relating to conscript soldiers. As democracy became actualized, propelling a continuous trend toward universal instruction, the problem of illiteracy transferred from the realm of theoretical controversy to that of administration tended to become the monopoly of bureaucrats and statisticians or of private agencies cognizant of fields untouched by public education. While the figures are neither precise nor, as between coun-

tries, comparable, it may be stated with reservation that in England the percentage of illiteracy fell from 33.7 for men and 49.5 for women in 1839 to 5 and 5.7 respectively in 1893 and in France from 55.2 between 1827 and 1829 to 5.7 in 1894. In the United States despite the effects of immigration the rate had declined to 10.7 percent in 1900. Belgium, influenced by French political forces and ideology, reduced its rate from 51 percent in 1840 to 14 percent in 1894.

In the German states the eradication of illiteracy during the nineteenth century was motivated by a force no less compelling than democracy—the nationalistic fervor first engendered by the impact of the French Revolution. The stress laid, for instance, by Fichte upon the cultivation of the human resources of the nation implied the same policy toward literacy as did the drive to exalt the national literature by enshrining it in the hearts of the common people. Although greatly diluted in the process of transmission to the political authorities these ideals finally resulted in the establishment in Prussia and ultimately throughout Germany of systems of compulsory education, giving effective form to a principle which largely under the influence of Protestantism had been accepted in most of the German states by 1800. Since, in the words of Baron von Altenstein, the government assumed the responsibility of "making the common man's lot agreeable and profitable to him" without "raising him out of the sphere designated for him by God and human society," the dissemination of literacy encountered little opposition from the upper classes. It proceeded with few complications until in 1893 and 1894 the percentage of illiteracy among the conscripts enrolled in the imperial army was only .24. Since 1913 the German authorities have considered it unnecessary to take statistics.

During the course of the century, as the general levels of national culture became an object of attention, the literacy rate was widely regarded as one of its most significant indices. Economic, religious and political explanations for the difference in rates between northern and southern Europe were overlooked and the conviction grew that illiterate peoples were, if not inherently inferior, at least unredeemed. Under the influence of the assured threat to the national literacy rate and of the assumed threat to American standards of civic competence the United States Congress in 1917 passed over the president's veto a law imposing a literacy test upon

all immigrants and operating, as a precursor of the immigrant law of 1927, to exclude natives of southern and eastern Europe.

The literacy test for immigrants represented a borrowing from a practise already associated with suffrage laws both within and outside the United States. Throughout the greater part of its history the literacy test for voters has been used as a weapon against specific groups which for some reason or other were considered dangerous to the dominant group. Its convenience as a method of restricting the suffrage without violating the fundamentals of democratic dogma, since the latter could be interpreted as implying universal literacy, was recognized as early as 1795, when it was incorporated into the constitution of the year III in order to keep the *sans-culottes* from the polls. Under somewhat analogous circumstances certain of the South and Central American republics, notably Brazil, have resorted to the same device. In Europe it has been used chiefly in countries where literacy was largely restricted to the upper classes, such as Portugal, which in 1872 had an illiteracy rate of 82 percent, Italy, which in the same year had a rate of 69 percent, and czarist Russia; and in such countries it might justly be called "pedantocratic" or "mandarinal." In the United States it was first introduced in Connecticut in 1855 and two years later in Massachusetts, the occasion being the inpour of tumultuous Irish immigrants and the organizers of native American indignation being the Know-Nothing party. When the earlier devices for nullifying the effects of the Fifteenth Amendment were becoming outworn, most of the southern states, beginning with Mississippi in 1890, instituted literacy tests, usually combined with ingeniously phrased alternatives in the form of grandfather or property clauses, which it was hoped would exclude the Negro without affecting the illiterate white. Of the other tests which have been imposed in the last forty years in New York, Wyoming, Maine, California, Washington, New Hampshire, Arizona and Oregon the New York test, which is administered under the supervision of the state department of education and attempts to examine functional rather than merely formal literacy, is generally regarded as the most effective.

The countries outside the sphere of greatest literacy did not remain entirely unaffected during the nineteenth century by the formulation of the new standards. While America, England and France, unsatisfied with the promise of

future improvement held out by their compulsory education laws, were beginning to attack the problem of adult illiteracy, countries like Japan, Italy and the Balkan states, aspiring to gain a competitive status in the family of nations and linking the eradication of illiteracy with escape from economic exploitation, made attempts of varying success to create systems of universal elementary education. In the case of the minorities of the former Hapsburg, Turkish and Russian empires the movements against illiteracy, although until recent years they failed to make much headway, were an integral part of the larger technique of nationalist revival, which depended in its beginnings upon the dissemination of national literatures and upon the resurrection of the national languages. Similar manifestations have occurred among the Irish and the Flemish, who have sought to perpetuate their native tongues by making them written languages rather than merely spoken dialects. Conversely, the political entities embracing minorities have sometimes looked to the inculcation of literacy in the official language as a method of checking the centrifugal forces of a heterogeneous population.

In a spectacular fashion the World War focused attention upon the problem of illiteracy, which became a factor of immense moment in the propagandizing efforts accompanying the unprecedented mobilization of national resources. The recent American movement against illiteracy, including the immigration law of 1917, the proliferation of agencies for adult education, the holding of sectional conferences, the organization of the ardent National Illiteracy Crusade and the eventual creation of the National Advisory Committee on Illiteracy in 1929, may be traced to the discovery that 24.9 percent of the American soldiers were functionally illiterate and to the inference that a still larger proportion of the American public was immune to the propaganda being broadcast by newspaper and signboard. The political changes which followed the war have also operated to give impetus to the movement against illiteracy in the so-called backward nations. The new republics of Europe, subjected to the force of democracy, have been further spurred on by the prestige of western standards. In China the Mass Education Movement, which dates back to the westernization campaign of the first decade of the present century, began in the period following the war to conduct a more efficiently organized offensive against illiteracy. Its construction of a

simplified code of ideographic symbols in the most widely used popular dialect (*Pei-hua*), which has partially overcome the staggering difficulties of the Chinese written language, has been supplemented by a concerted movement to produce translations, new works and newspapers in the vernacular. But no civilized country with the exception of India is besieged by more forces antipathetic to the spread of literacy than China: the lack of responsible government, the bankruptcy of the system of taxation, civil dissension, undeveloped national resources, an enormous preponderance of rural population, heterogeneity of language, have all acted to prevent even the gathering of statistics on illiteracy. Turkey, facing a similar mechanical problem in the complexity of its script, has adopted a Latin alphabet of twenty-nine characters and through the establishment of national schools is making progress in educating its largely illiterate populace.

Perhaps the most sustained and comprehensive attempt yet made to "liquidate illiteracy" is being carried on in Soviet Russia. Until the time of Peter the Great the Greek Catholic church held somewhat the same monopoly of literacy as the Roman church in mediaeval Europe; *diak*, the Slavic term for churchman, became the designation of the scribe as "clerk" had in western Europe. In spite of the sporadic efforts of Peter and of Catherine, the former motivated by his conception of westernization and the latter by the ideas of the Enlightenment, to disseminate elementary education it may be assumed that in 1783 the percentage of illiteracy was at least equal to that of the rural population—about 94 percent. The attempts of various shades of humanitarian reformers to reduce this deplorable percentage provoked on the part of the repressive czarist regimes measures of retaliation, the violence of which was aggravated by the close actual interrelation between the intelligentsia, especially the *narodniki*, and revolutionary movements. According to the census of 1897 the percentage of illiteracy was 78. The modern movement, inspired by Lenin's dictum that without literacy "there can be no politics, there can be only rumors, gossip and prejudice," has set out to create the necessary foundation for the Soviet campaign of "political and economic enlightenment." Through the innumerable "liquidation points" which have been founded in community houses, factories, shops and village reading rooms the Soviet government is progressively reducing the per-

centage, 43.3, indicated by the census of 1926. Between 1913 and 1928 the circulation of newspapers increased from approximately 2,500,000 to 8,250,000. An interesting experiment has been made in the manner of dealing with the languages of minorities, many of which have under the Soviet government been committed to writing for the first time; by carrying on education in seventy different languages the government has complicated its own problems but greatly curtailed the difficulties confronting the illiterates themselves. Fascist Italy also illustrates the successful adoption by an antidemocratic movement of a technique tried and proved in the political milieu against which it is a reaction. It is probable that the percentage of illiteracy computed at 28 percent for 1922 is being progressively reduced as a result of the reforms undertaken under the supervision of Giovanni Gentile.

Modern statistics on illiteracy are available for little more than half the population of the world—the principal lacunae being in regions of Asia, Africa and South America, where literates undoubtedly represent trifling minorities. But figures on illiteracy even when derived from the most efficient of statistical inquests provide precarious bases either for comparison or for deductions as to their absolute validity. The margin of error, far from negligible in the case of the most comprehensive basis, the census, becomes magnified when the rate is obtained, as in England, from the marriage register, which in the year taken in the table concerned only 1.5 percent of the total population. Variations due to the minimum age considered are also significant: in Bulgaria, for instance, when the rate of illiteracy in 1920 is computed as a dividend of the total population, it is 55.54 percent; as a dividend of those over five years of age it is 50.47 and of those over ten, 46.75. A specific age group may reveal a rate widely divergent from the total rate: thus in Russia according to the census of 1926 only 4.3 percent of men twenty-four and twenty-five years old and 11.8 percent of women of nineteen were illiterate. In many countries, such as Russia, India and regions formerly under Moslem domination, sex affects the literacy rate: the Indian census of 1921 showed 16.1 percent of males over ten and only 2.3 percent of women to be literate according to the relatively stringent criterion imposed. Total rates also obscure the factor of regional distribution, giving no indication of the often tremendous disparity between urban

POLITICAL DIVISION	DATE	GROUP COVERED	PERCENT- AGE OF ILLIT- ERACY
Europe			
Belgium	1920	8 years of age and over, unable to read and write	7.9
Bulgaria	1920	10 years of age and over, unable to read or write	46.7
Czechoslovakia	1921	7 years of age and over, unable to read and write	7.0
Denmark	1921	Of school age and over, unable to read and write	0.1
England and Wales	1924	Signing the marriage register by mark	0.3
Finland	1921	15 years of age and over, unable to read or write	30.1
France	1921	10 years of age and over, unable to read and write	8.2
Hungary	1920	6 years of age and over, unable to read and write	15.2
Italy*	1921	Over 6 years of age, unable to read	28.0
Netherlands	1918	Signing the marriage register by mark	0.3
Poland	1921	10 years of age and over, unable to read	32.8
Rumania	1920	10 years of age and over, unable to write	45.0†
Scotland	1923	Signing the marriage register by mark	0.3
Spain	1920	10 years of age and over, unable to read and write	42.9
Sweden	1921-22	Liable to military service, unable to read and write	0.2
Switzerland	1906-10	Signing marriage register by mark	0.4
U. S. S. R.	1926	Above 7 years of age, unable to read and write	43.3
North America			
Canada	1921	10 years of age, unable to read	5.1
Mexico	1921	All ages, unable to read and write	62.2
United States	1930	10 years of age and over, unable to write in any language	4.3
South America			
Argentina	1913-24	Average of conscripts and enlisted men	24.0
Brazil	1920	5 years of age and over, unable to read and write	71.2
Chile	1920	5 years of age and over, unable to read	40.8
Asia			
India	1921	10 years of age and over, unable to read and write a short letter	90.5
Japan	1925	Conscripts unable to write and figure	0.9
Africa			
Egypt	1917	5 years of age and over, unable to read and write	92.0
Union of South Africa	1921	All ages, unable to read and write	90.3

* Figures for Tuscany only, which may be deemed fairly representative of Italy as a whole.

† Estimated.

Source: For the United States: United States, Bureau of Foreign and Domestic Commerce, *Statistical Abstract of the United States* (1931) Table no. 26; for U.S.S.R.: American-Russian Chamber of Commerce, *The Economic Handbook of the Soviet Union* (New York 1931) p. 132; for all others: compiled from United States, Department of the Interior, Bureau of Education, "Illiteracy in the Several Countries of the World" by J. F. Abel and N. J. Bond, *Bulletin*, no. 4 (1929).

and rural illiteracy. Again, the amount of illiteracy figuring in the total may in large degree be the share of a particular group, such as the Negroes in the United States. Despite the reduction of almost 50 percent in Negro illiteracy between 1880 and 1920 as a result of the opening of public educational facilities to Negroes, the rate in 1920 still hovered around 22.9 percent. But even when these and other factors have been weighed, the statistics still fail to measure the numbers effectively rather than merely formally literate.

Once literacy has been generally diffused among the masses of a society, it tends to become indispensable to the social process and the nonconformist is penalized by isolation. Rousseau omitted reading and writing from Émile's youthful education, satisfied that Émile would seek these arts of his own accord as soon as he

came into touch with the literate world. Besides multiplying the uses of writing, the diffusion of literacy atrophies many of the mechanisms of oral communication which except in periods of general maladjustment spring up spontaneously in societies predominantly illiterate. The press superannuates the town crier; the peripatetic minstrel disappears as the circulating library grows. But while the individual in an illiterate society is likely to have more contacts with the group than the illiterate in a modernized society, these contacts are, in the ordinary course of events, limited to a narrowly circumscribed environment. As one of many social and technological factors accelerating communication, the diffusion of literacy has played an important part in the breakdown of barriers between atomistic groups and in the expansion of the range of stimuli to which the common man

is exposed. The faith of the early nineteenth century that "reason" and content would necessarily flow through the new channels of communication provided by literacy is still echoed: in twentieth century America strikes have been laid to uncontrolled passion and the passion itself to illiteracy. However misguided the faith appears when accompanied by its premises, it would be rash to say that the nineteenth century advocates of literacy were wholly wrong in their conclusions. The two outstanding recent revolutions have begun in countries with large percentages of illiteracy and perhaps in their campaigns for liquidation the revolutionary governments now established only prove their awareness of the human tendency to give assent to the written word, whether the word speaks for tradition or for innovation.

HELEN SULLIVAN

See: WRITING; EDUCATION; ADULT EDUCATION; LITERATURE; PRESS; PRINTING AND PUBLISHING; INNOVATION; MOBILITY, SOCIAL; MIDDLE CLASS; DEMOCRACY; NEGRO PROBLEM; NATIVE POLICY; ISOLATION; IMMIGRATION; URBANIZATION.

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LITERATURE. Viewed as a whole a body of literature like a body of magic or a system of law is part of the entire culture of a people. The characteristic qualities that distinguish it from other literatures derive from the characteristic qualities of the life of the group. Its themes and problems emerge from group activities and group situations. Its significance lies in the extent to which it expresses and enriches the totality of the culture. Although the groups with which anthropology ordinarily concerns itself are preliterate, the functionalist standpoint as developed in anthropology is illuminating when applied to the setting of literature in a culture. Viewed thus literature is neither

an esoteric activity, as the formalists would contend, nor a purely instrumental activity, directed to external ends in the group life, as the extremist element in the Marxian school would have it. It is an integral part of the entire culture, tied by a tissue of connections with every other element in the culture; yet possessing a function of its own and ministering best to the life of the group where it performs that function with the greatest artistry and the deepest congruity with the basic assumptions and the accredited purposes of the group. And it should be added, to point the complexity of relationship, that these basic values are not something given but are the end products of a past in which literature has itself played a substantial part in the process of cultural construction.

Literature is thus both culture forming and culture ridden. Its connections with society are so integral and pervasive that there is a temptation within every sociological school of criticism to press to the conclusion that society is the play itself and not merely the backdrop against which the play is enacted. Certainly the range of social influences on literature is as broad as the entire range of operative social forces: the prevailing system of social organization—including the class structure, the economic system, the political organization and the deeply rooted institutions; the dominant ideas; the characteristic emotional tone; the sense of the past and the pattern of the future; the driving aspirations and "myths," and their relation to the contemporary realities. There is nothing in the compass of social life that does not play its part—small or large, directly or by deflection, immediately or by varying removes—in giving literature the impress of its surrounding world.

The sort of determinism which this involves is not, however, the rigid and mechanical determinism that has played havoc with the charting of relationships in the entire realm of social life. It cannot afford to isolate a single element in society—whether economic or ideological—and assign to it a causal role in the final determination of literature; nor can it premise an immediacy of relation between literature and the social factors or a quantitatively equal response to the impact of social forces. The whole of the social process—including material, conceptual, emotional and institutional elements—may be regarded as containing the potential determinants of the direction and character of

the literature of a period. At any time the pace and character of social and intellectual change sharpen issues, pose problems, precipitate conflicts and establish harmonies that are distinctive for that time; a "social situation" is brought into the area of operative influence which, in its selection of elements and in its orientation, is unlike any other social situation. And while this selective process is projecting certain dynamic and significant issues into the consciousness of the time and obscuring others, another selective process is at work, from the side of the writer, singling out those elements which have managed to produce an impact on him and weaving them into a pattern which is compatible with his standards of art and his view of human life. Where these two mechanisms of selection interlock in the work of a particular writer a point of contact is established between literature and society.

In terms of such a dynamic and selective process some justice can be done to the subtle and complex connections that link literature to the operative social whole. Critics who attempt to test the hypothesis of a socially determined literature by measuring the degree to which certain great writers were absorbed in the public issues of their day set up a mechanical unilinear determinism which they find no difficulty in destroying. Thus it might be shown that Chaucer's poetry is a poor mirror of the more obvious political issues of the England of his day, and that even Shakespeare was alive to the glory of the victory over the Armada but not to the realities of the enclosure movement. But such a line of inquiry assumes a simplicity that does not exist in the functioning of the social process. Any appreciable change in the social process communicates itself to the body of literature not directly but through a ramifying network of social relations, with every chance that its force may be multiplied or deflected in the devious process of transmission, or that its influence will be complicated, distorted or nullified by some other change arising elsewhere in the social process. For society is neither neat structure nor unobstructed process: it is a complex of end products from the past, of functioning institutions in various stages of development, of tangled idea and emotion, of hesitant purpose and frequent cross purpose. In such a milieu the surprising fact is not that there is so little clear evidence of the transmission of social change to the literary process, but that there is so much. In the case of particular

writers the relation seems of course even more erratic than in the case of a body of literature. For to what extent the social process will push its significant changes across the threshold of the writer's consciousness, and to what extent he will embody even that proportion in the emotional pattern that constitutes his artistic vision, can be explained only by the conjunction of his own biography with the history of the society.

The essential task of literature is to lay bare the foundations of human emotion: to this revelatory process the social forces can give only direction, impetus and an ideological impress. It is a commonplace of criticism that literature transcends the boundaries of the particular culture, that it speaks "the universal language of the human heart." Whatever the culture, its basic literary themes are the same—birth and death and love and jealousy, individual conflict, communal experience, triumph and defeat. They are linked to the biological bases of life, to its psychological invariances, to the necessities of the collective experience. It is significant that the literatures of the most varied cultures have meaning and beauty for an outsider even when their social organizations seem to him bewildering and their basic values absurd. For the artistic imperative to which literature is the response is universally operative. Everywhere the writer takes the stuff of experience in the life of the group and washes it in the powerful emotional stream of his personality. The drab incident is made vital, the abstraction human and dramatic, the idea imaginative. Homer's gods survive across the centuries because they are humanized; Dante's theme of divine love is made immediate and dramatic; and the group activity that is the theme of modern proletarian writing is translated into terms of its incidence on individuals. For the literary process society is only the river bed; the stream is the flow of human life.

In fact the two processes are scarcely as distinct as that. The emotional pattern of the individual writer, which could claim, if anything could, to be a primary datum, is as a matter of actuality socialized in the very process of construction, and the individual artistic vision is a selection from potential elements; the emotional response of the reader is the product, as Tolstoy points out, of a sort of social contagion and certainly proceeds in an emotional milieu already socially conditioned; the valuation of the writer and the guidance of the reader—

the dual task of a highly subjective body of criticism—proceed by canons which, to avoid being chaotic, must be socially rooted. Literature is whatever reaches through words to the human; but in the process the entire social realm must be traversed.

Literature is seen in clearest social perspective as an institution—a cluster of structure, usage, habit, idea, technique—the whole containing a principle of growth of its own but responding always to the change and stir in the varied life of the institutions with which it is interwoven. And as such it consists of a scheme of controls, through which it performs its social function by organizing the verbal expression of experience and thus integrating on an emotional level the activities of the group with its underlying view of life.

The basic material of literature is thus experience. But the experience that has found expression in literature has never been as broad as that of the entire culture. It is always a limited experience that is thus embodied—the life and the vision of life of particular groups within the culture. In the literature of Periclean Athens it is the experience of the male citizenry that is expressed, but not of the metics or the slaves or the women; in the literature of imperial Rome it is the experience largely of a leisure aristocracy and not of the industrial population or the serfs or, with some exceptions, of the provincials; in the literature of mediaeval Europe it is the experience only of a fighting, jousting and love making nobility; in the literature of China it is the experience of a high officialdom or of a petty bureaucracy, but not of the masses of peasantry. Sometimes the confines of expression have been determined by the class groupings, sometimes by the distribution of literacy and leisure, sometimes by arbitrary and traditional tabus. In fact literary history could be approached illuminatingly from the point of view of the forces that have drawn various groups and strata of the culture into or kept them out of the body of literary expression. In the western world there has been since the breakdown of feudalism a steady extension and widening of the limits, so that new groups have been continually drawn into the literary process—first, generally, as readers and then as writers. The entire period since the commercial revolution has been dominated by the rise of the middle class to the literary hegemony in the new capitalist nation states that

succeeded the feudal regime. And the anticapitalist revolutionary movements of the last hundred years have carried with them, both as result and as an integral part of their purpose, the opening of channels of expression for the experience of the underlying population—from the workmen's literature of Chartist England and of the France of George Sand to Gorki's delineation of the life of outcasts in czarist Russia on the eve of the revolution and the direct and unvarnished writing of worker correspondents in Communist Russia.

The large tidal changes in making new and untapped resources of experience available for literary expression have resulted from changes in class stratification. Another accession of experience, that of women, was made possible by the breaking down of the tabu which women's inferior economic position had placed about the masculine monopoly of writing; the timidity with which Jane Austen and Emily Dickinson wrote indicates the gap between their period and that of the present when it is often possible for a woman to have, in Virginia Woolf's phrase, "a room of her own." But tied up with these changes affecting class and sex groupings there have been shifts of intellectual horizon, contacts with hitherto unfamiliar cultures, reorientations in the effective moral codes, which have broadened and deepened the experience of the entire culture and which have uncovered new levels within the individual consciousness. The effects of the crusades and of the Renaissance on western European literature, of the geographical and scientific discoveries on Elizabethan literature, of the rise of urban life on the eighteenth century novel, of European expansion into the exotic regions of the Far East on late nineteenth century French literature, of the disintegration of rigid bourgeois morality upon the entire range of western literature at the turn of the twentieth century, as exemplified especially in Hardy, Ibsen and Dreiser, and of psychoanalytical research and speculation on the modern novel are instances of how the large and pervasive social forces uncover new strata of experience. The forces mentioned are of course in no sense primary or crucial; they are themselves merely links in the endless interlocking chain of causation and concomitance that constitutes the process of history; but from whatever source they proceed, the part they play in broadening, enriching or impoverishing the field of human experience constitutes their primary significance for literature.

Literature in turn in organizing this experience in language patterns heightens it as well; it selects and points out evocative values not appearing on the surface. But to do this consistently requires more than a philosophic or deeply human sense of values, although that is indispensable. It requires also a preoccupation, much like that of the philosopher or the scientist in his own realm, with the dramatic and significant in human behavior; a disciplining of sensitivity and perception; a familiarity with a far flung body of traditions; a mastery of a technique. In this sense literature takes on the apparatus and the conscious scrupulousness of the other arts. Vergil's desire, after years of constant polishing of the lines of the *Aeneid*, to destroy the whole poem at his death because some passages still remained inferior and Flaubert's balancing of *le mot juste* are merely the more familiar instances of an inherent pressure toward refinement in the literary process. The result is the differentiation of a specialized literary group from the main stream of the activities of a culture. Such a group tends to become intellectually ingrown and to narrow the field of its exposures. Euphuism and Gongorism, the schools of Donne and of Rimbaud, the barriers within which Joyce or the Sitwells or Gertrude Stein enclose their incommunicable symbols, are end products of the introversion that is implicit in every stage of the building of a literature. Here as elsewhere in the culture process the inner impulses of a specialized discipline must be reconciled with the larger demands for growth and freshness.

Literature thus faces continually the need for rebarbarization. In terms of the response to that need many of the excursions into new regions of experience take on meaning. The most persistent of these has been the recurring cult of the folk and the folk mind. The folk itself is rarely drawn into the ambit of literary expression, except indirectly through the frequently sentimentalized mediation of "literary" treatment. But it does find its expression orally in ballads, tales, heroic songs, fables, proverbs, gnomic sayings and legends. Whatever its origin, this folklore or folk literature grows by repetition and accretion and constitutes at any time the larger proportion of the verbal expression of a culture. In periods before the formation of a literary language, as in Russia's dark centuries before Lomonosov, and among groups cut off by economic subjection, isolation and illiteracy from individualized literary

expression, as with the peasant populations of Europe and the American Negroes and hill folk, the folk literature is the only literature. Because such folk expression appears to rise straight from a deeply rooted experience and because it appears to be the product not of a single great individual talent but of successive generations living highly patterned and custom encrusted lives, writers and critics have found in it a vigor, an immediacy and a refreshing sincerity that they have commonly found wanting in the "literary" literature. Since the mediaevalist movement of the eighteenth century this admiration of the folk mind has played a large part in critical thought and in literary expression. That Goethe and Grimm expressed great admiration for the Yugoslav folk ballads was as characteristic of their day as the contemporary American interest in Negro spirituals. In fact many have found in the folk mind the source not only of the folk literature but ultimately of all literature. In the wake of the romantics nineteenth century literary theory held that the literature of mediaeval Europe was not the result of individual creation but was forged in the rich life processes of the mediaeval folk. This is now radically questioned, and the acceptance of Bedier's researches on the origins of the *chansons de geste* would indicate a tendency, at least in the case of the more sustained literary works attributed to the folk mind, to emphasize the creative role of particular individuals in gathering and fusing into an individualized expression what must in the beginning undoubtedly have been traditional folk material.

It is not difficult to find in the intellectual stream since the early eighteenth century the currents which have produced the emphasis on the folk mind. The cult of nature which found expression in the Lake poets as well as in Rousseau and the *philosophes*; the differentiation between the simple sincerity of the rural mind as contrasted with the civilization-contaminated life of the cities; the construction of a "noble savage" whose idyllic happiness flows from his obedience to "nature's simple plan"; the discovery by nineteenth century anthropologists of primitive civilizations, whose tightly knit cultural integrity lay in the dominance of custom and the supposed subordination of the individual to the group, and the idealization of the European peasant by intellectual and literary groups as far removed as Tolstoy and the Russian *narodniki*, Hamsun and the earlier Ibanez

—these were not so much the forces behind the folk cult in literature as themselves a related expression of deeper lying social forces. A function of rebarbarization similar to that which contact with the folk spirit has performed for the literary mind has been performed also by cults of the heroic, from the eddas and the Homeric heroes and the Prometheus legend to the Napoleon pattern in European literature and the superman philosophies of Carlyle, Emerson and Nietzsche. More recently a new primitivism has arisen, largely under the stimulus of anthropological researches into primitive art and sex life and imperialistic contacts with primitive groups, and constituting something of a literary Gauguinism. In another realm of experience many writers, following in the wake of the Freudian researches, have plunged into the jungle of the submerged and repressed sexual impulses; or have, like D. H. Lawrence in *Lady Chatterley's Lover* and James Joyce in *Ulysses*, broken down the tabus that, through moral codes and through the more directly institutionalized forms of censorship, have in the western Christian civilizations hedged about the exploration by literature of the physical sexual experience. All these literary allegiances—to the folk mind, to the hero cult, to the primitive mode of life, to preoccupation with sex activity—spring in common from the continually felt need for the rebarbarization of a literature in which the experience represented is continually threatening to grow thin. But they differ from the large movements which brought the experience of the middle class, the proletariat and women within the range of literary expression; they do not represent on the part of the writers a direct exposure to new areas of experience. They are derivative and vicarious. They have been as much escapes from experience as accessions of it.

Before a developed technique emerges in any literature even the best of individual achievement is but random expression, and whatever progress it has made in charting experience may at any time slip away again. In this sense the accumulated technology of literature—what may be called, in paraphrase of Veblen, the state of the literary arts—becomes part of the social heritage. All literary technique is concerned in some way with the manipulation of words and word patterns. The word, with its sound values and its emotional connotations, is the basic constituent of the technical apparatus, just as experience is the material to which it is

applied. Language may thus be regarded as implementing literature, and, as Boileau emphasized, the richness and flexibility of a language will often condition the potentialities for greatness in the literature which is linked to it. The crude stage of the Roman language, as reflecting the undeveloped culture of Rome, at the period when Ennius first attempted to force it into the complicated literary molds of Greece, accounts in no small part for that lack of *ars* with which the more flexible Augustans taxed him. The emergence of literary expression in the vulgar tongues of the Romanic nations had to wait upon the slow process of linguistic evolution in which the competing languages attained at least a rudimentary balance. The advance represented by the *Pléiade* in France and the Elizabethans in England is incomprehensible without an understanding of the immediately preceding or accompanying climax in linguistic development. Much of comparative literary criticism has concerned itself with such contrasts of the basic linguistic materials and their effect upon literary expression. But on the whole it is probable that most of what seems thus in the nature of linguistic differences may be referred back to differences in the texture of the culture. For while it is conceivable that words should serve only as quasi-mathematical symbols of communication and that whatever emotional values they ultimately contain should derive from their technical handling and their literary patterning, it is actually true that the words themselves come already laden with pleasure values and with connotations out of the culture. It is upon this substructure of connotation that the literary artist builds his superstructure of emotional values; and he often finds that because the words that he uses are already emotionally tinged they are not bare obedient instruments of his will but living things whose accretions from the culture are hostile to his purposes. Language may thus be as much an obstacle as an aid to literary expression.

The literary technician arranges his language in word patterns, aiming thereby to achieve patterns of sound and thought which are emotionally evocative. Rhyme, rhythm and assonance belong in the first category; imagery and idea in the second. These technical elements may be combined into further patterns, as in the sonnet, the ballad, the classical oration or the epic poem. These larger patterns may vary from a more or less rigidly determined mold,

such as the sonnet, to the larger literary types or genres, such as the drama or the novel. As technological forms these elements are products of a process of invention and development which must have involved a succession of individual experiments and adaptations, each building on the level previously reached. Brunetière placed a good deal of hope in a natural history of literary forms and styles, but the suggestiveness of his prologomena was never fulfilled by the results of his research. With few exceptions the origins are lost in the mist of history, and the developments upon them proceed by almost imperceptible gradations or, obscured in the creative process, elude all attempts at isolating them. The origins of the early clusters of nature legends, which may be found in very similar forms in Egypt, Babylonia, India, Judaea, Greece and the Celtic and Teutonic tribes, their relation to each other and the method by which they reached their historical distribution are still extremely controversial. With the epic there emerged a highly developed literary form, which winnowed and re-sorted the ballad clusters that had grown up about the myth legend content. But the processes by which these ballad clusters were forged into the formal epics are only dimly charted, as is also the transition from the dithyramb to the tragedy and from the village satiric songs to the comedy. With advancing research the origins of the novel and the short story are being continually pushed back to a remoter antiquity.

All literature which is of any value is of course invention; but the fashioning of new literary forms and genres involves a special sort of invention which bears somewhat the same relation to the creative process that invention in the industrial arts bears to the economic arts. But there is a greater inertia in the literary process: there is not the same pressure which capital accumulation and economic competition exert upon technological invention; nor is there the same rate of obsolescence which technical advance forces upon industrialists. But the sharpest difference lies in the fact that every literary form becomes a vested interest. The prestige of the tried pattern tends to deflect the craftsmanship of each writer from the search for new forms to the extraction of all the implications that the existing ones hold. The operative considerations are aesthetic rather than utilitarian, and the continuous need for effecting functional readjustments to a developing, larger situation is not as apparent in literature as in

economics. In fact aesthetic and sentimental considerations often induce a reversion to archaic forms.

But while such a functional adjustment is not apparent in the immediate sequence of experimental changes in literature, it would be dangerous to conclude that it was not operative in the larger areas of change. In fact the great importance of the study of the genre in literary history lies in the relation which it bears to the cultural compulsions of the period. These compulsions do not operate unswervingly and equally on individual writers; there is the obvious fact that every period shows so great a divergence of literary expression that there is often a greater affinity between two writers of different periods than between two of the same period. To that extent there is an element of significance in Lytton Strachey's remark that Pindar could have written under the Georges and Keats on the eve of Marathon. And in any period the process of literary experiment consists obviously of numberless innovations varying from tentatives toward a slightly changed form to heroic attempts at transforming an entire genre—each of these experiments responding to complex personal and often erratic motivations. The effect of the social forces of the period in determining the literary form is not a direct and unilinear one: it is selective. From the array of potential variations certain ones are over a period of time selected for survival. And the criteria of selection lie in the changing experience of the time. Changes in social structure and in ideological currents bring new experience, and this experience refuses to be crowded into the old forms. They are no longer adequate to express it. And the new literary forms that emerge out of the survival and persistence of certain experimental changes and the lapsing of others may be said to be functionally related to the new experience.

For example, the intensification of cleavages between social classes which tends to accompany a period of urbanization may result in the emergence of new forms or the reemergence of forms long neglected. The social realignments and tensions of seventh and sixth century Greece, which shattered the older tribal homogeneity, ushered in on the one hand a new and flexible type of personalized lyrical poetry, represented by Alcaeus, Sappho and Anacreon, and on the other the naturalistic satiric poems of Archilochus and Simonides of Amorgos. The further growth of the city-states stimulated the devel-

opment of two new literary forms, the choral odes and the drama, both more adapted to the amusement and edification of the urban collectivities. The growing importance of urban life in the modern period, typified most strikingly in the activities of the Spanish towns, found its reflection in the picaresque novels portraying the urban sharpers who awaited their guileless victims from the country. The popularity of this genre in its French and English forms created a demand among the growing urban middle classes of these countries for a more wholesome use of the prose narrative technique. Thus the rise of the homely novel of sentiment and chastity, which became the hallmark of subsequent bourgeois culture, is best considered against the accompanying economic transformation rather than as a revival of the abstract novel form, which may be traced to the Hellenistic romances, or by the more archaeologically minded to Egyptian prototypes.

So closely is the literary form tied to the culture out of which it has grown that when another culture attempts to take it over there is a tendency toward a transfer of the ideological patterns of the older culture. Vergil, in an age which stood heir to the concepts generated in the long period of intellectual quest and spiritual restlessness that had intervened since Homer, attempted nevertheless to think of his hero and his problems after the patterns and in the atmosphere of the Homeric heroes. The mediaeval fame of Vergil in its turn deflected Dante's portrayal of the Middle Ages; although drawing upon the ethos of its own age the *Divina commedia* strikingly reflected, often unconsciously, the pre-Christian world. Tasso was led by his love for older models to stray from the narrow path of sixteenth century Catholicism, and the Puritan hatred of Satan was curiously transformed in Milton. The unsuccessful attempts of Chapelain, Mesnardière and the literary intimates of Richelieu to forge an epic worthy of the new dignity of France illustrate how futile may be the transplanting to an uncongenial soil of a form which flourished in the soil of its own culture. The epic machinery, which had been fashioned in anthropomorphic polytheism, collapsed when placed in a Protestant setting, as is indicated by the offense caused to Dr. Johnson's religious sensibilities by Milton's familiarity with God.

If the forms and genres of literature respond to the social compulsions of a period, the responsiveness of theme is even more striking.

There are of course permanent human themes that run through the literatures of all cultures, but in each cultural situation the basic theme is clothed in a new form. This may be illustrated by the varied treatment accorded the theme of love. As Marx recognized, the sexual instinct is universal, but the forms of marriage and courtship vary with the underlying economic relationships. While not a few of the variations in the conception of love—at least as they are reflected in literature—seem adventitious, the relationship is generally clear. Infidelity, the recurring tragic theme of the ballad stage of society, becomes the spice of Restoration comedy. The love of the flesh, sublimated by the scholastic poets of the Middle Ages into love of God, remained to haunt the less unified generation of Petrarch and to delight the lusty burghers immortalized by Boccaccio. The mistress worshiped at a distance by the platonic troubadour in the last stages of feudal society was displaced by the insatiable Wife of Bath.

But the outburst in the fourteenth and fifteenth centuries of antifeudal satires and fabliaux which attempted to reveal the true character of woman in all its designing ramifications could not permanently supplant the tendency to sentimentalize the weaker sex. When the descendants of the insurgent burghers of those centuries became in their turn the intrenched middle class of the eighteenth and nineteenth, the genteel tradition of chivalry and sentimental love received a new impetus. It is significant, however, as a reflection of changing class ideals that the sentimental literature of the later period was intensely preoccupied with the institution of marriage and with the economic advantages of a successful marriage. Among certain of the romantic poets there is revealed a tendency to regard the woman as an intellectual equal, and with the growing social and economic emancipation of woman the modern novel is stressing the desirability of sexual as well as intellectual equality.

One of the crucial facts about a writer is his kit of values. This is recognized in criticism, where writers are characterized and classified in terms of their affiliation with one or another of a group of schools or literary philosophies, such as classicist, romanticist, realist, humanist, naturalist. These philosophies determine what they shall select for treatment and from what viewpoint they shall treat it. They represent the handle by which the writer grasps reality.

But they are not only instruments in the creative process; they are also embodied in the critical method of an age, serving to canalize the creative stream. They arise in response to social change. A comprehensive change in the social structures may call for a reformulation or reorientation of the prevalent conception of life. This is accomplished in a systematic fashion by the philosophers and through an imaginative and emotional projection by the artists and writers. The connections between the two groups may often be distinctly traced, as in the cases of Euripides and Socrates, Lucretius and Epicurus, Boileau and Descartes, the Schlegels and Schelling, Zola and Comte. The direction of influence is generally from the philosopher to the writer, but the influence is not necessarily one-sided; in reality both formulations may be followed back to the same source.

Conceivably any *ism* can constitute such a philosophy for an author. Any issue that has been long wrangled over may attain the dignity of a school and then of a movement, and after being fought for tenaciously may end by organizing literary expression. Actually there have tended to be certain relatively stable points of view that have served this purpose. Whether these points of view are permanent aspects of human thought, as has been claimed for classicism and romanticism, is very doubtful. Such a division of the field normally involves a straining and extension of each term, so that it becomes practically meaningless. But it must be admitted that there are discernible throughout literary history certain poles between which literary expression has oscillated. The power attributed to the gods and the invisible forces guiding human life measures man's estimate of the limitations of his own power. The sense of human power and self-sufficiency shown in the *Iliad* or the eddas, where the gods are symbols of the superhuman courage of the warrior, has never proved lasting. Homer is followed by Hesiod and the Eleusinian mysteries, *Beowulf* and the *Battle of Maldon* by *Sir Gawayne and the Green Knight*. The anthropomorphic is engulfed by the animistic, by a folklore of magic and witches and monsters. Instances could be multiplied from the ancient and mediaeval literatures of recurring cycles of humanism and supernaturalism. But even in those literatures the antithesis is oversimplified. And by the time of the Renaissance, in which so many historical traditions and fresh social forces converged and cultural boundaries were broken

down, the idea of polarity is no longer useful. In the heightened confusion each writer had to find or fashion for himself an artistic credo to serve as a center of stability. And if this credo narrowed his imaginative scope or distorted his vision of reality, it was only a hazard that has to be run in every imposition of a more or less formal philosophy upon an artistic process.

But every writer has not one but two philosophies—his more or less conscious artistic credo and, lying deeper than that, his often unconscious vision of life and scheme of values. The first is the rhetoric of his writing; the second its logic. Through the first he is assimilated to some "school" within the craft; the second fixes him in the setting of his larger world—his place in the social structure, his economic position, his orientation toward the vital issues of the day, his responsiveness to the contemporary aspirations and realities. In a writer such as a social *Weltanschauung* is likely to lie not on or near the surface but out of sight, where it is the more deeply embedded and the more difficult to quarry.

This more basic philosophy involves the relation of literature to the totality of society. But society is in this case too inclusive a term to be useful in analysis. It must be split up into elements which fall, to start with, into two main groups—those relating to social organization and those relating to ideology. In the first group may be placed technology, economic activity, the organization of the state, the structure of classes, social relations of dependence and domination, the important institutions and the distribution of power; in the second intellectual temper, emotional tone, ethical and religious conceptions, aesthetic achievements. The Marxist approach subordinates the second group to the first, making of it a superstructure (*Überbau*) which rests on the first as foundation. It is truer to say, if the inquiry is into the forces exerting an active influence on literature, that it is responsive to the whole of society, including not only the social organization but also the ideological structure, of which literature is itself a part. And it is responsive to the whole of society seen not structurally but dynamically, so that at any time it is only the elements that have been projected by change and conflict into the arena of operative forces that need to be considered.

Literature will be thus most responsive to the dynamic of a society in transition. Social

change is going on at all times in all social orders; there is no stationary state. But the sense of it and the compulsions it sets in motion vary in intensity just as change itself varies in pace. When the pace becomes sufficiently great so that it no longer represents merely variation within a social system but a sequence looking to its breakdown, the result is a transition society. By its very nature the period of transition has in it elements at once of disintegration and construction. It does not start until something that was a unity begins to break down; it does not end until something new that is a unity has been achieved. Between those termini the sense of wrack or the vision of construction, the stress of conflict, the emergence of order, leave a deep impress on experience. But it is a fevered impress, lacking the strength and firm dignity that arise out of an integrated culture. Routh points out that the *Iliad* shows the marks of having been written in a society that was a unity, the *Odyssey* for a conquered race in a society that had crumbled before the Dorian invasion. Petrarch wrote in an Italy whose Dantean unity—an ideological unity, not political or economic—was breaking up. Shakespeare wrote when Elizabethan unity was in the forging, with the moving vision of the emergence of a new collectivity—English nationality—before him; the metaphysical poets, descending the arc, wrote in the break up of the Elizabethan unity. There is in both the Elizabethans and the metaphysicals the feverish tone of a transition literature; in both a preoccupation with death; but while in the Elizabethans death was the great tragedy, it held for the metaphysicals a strange fascination. In the post-war disintegrative period of modern capitalist society, with the strong focusing of its contradictions, has come again an interest in death, represented strikingly by Thomas Mann and Robinson Jeffers; the one looking upon it as the soil out of which art and beauty spring, the other looking upon it as the final breaking through to reality—the only escape from the body of this life.

In the entire complex of forces making up a society the economic organization, and especially the class structure, have quite generally, under Marxian influence, been singled out as determining the form and the idea patterns of literature. Translating this into terms of a changing society it has been the dynamic of the class structure—the class struggle—that has been thus singled out. The assumption that this has

always affected literature directly is used only by the less critical thinkers of the school; the more considered position is that it attains its effects as a selective process and generally through the mediation of the ideological elements in society. The impact of society on literature lies in the dynamic convergence of both sets of factors—social organization and ideology—each influencing and influenced by the other. The richest body of material that has yet been uncovered for the study of this complex relationship lies in the history of the periods of economic transition in various cultures from the tribal social organization to the feudal, from the feudal to that of petty trade and industry and from that to capitalism. In the history of the capitalist social system the significant relationship is that between capitalistic enterprise, individualist thought and the romantic strain in literature. The present period, which is considered by Marxians to be a transition period representing the disintegration of capitalism, is being widely analyzed from this general point of view.

The processes by which literature has responded to the operative social forces are the ordinary processes associated with the life of institutions. Innovations and tradition, insurgency and the vesting of interests, cultural borrowing and native growth, the carry over of intellectual patterns, the compulsive power of myth—these processes, found throughout the cultural fabric, have also left their mark on literature, adding their purposes and rationale to its own. But literature is also an active instrument: through its evocative power it molds behavior, carries over the propaganda, conscious or unconscious, of its intellectual setting, plays its part in building and breaking social movements and creates beauty values to invest an old order or sanction a new.

The withdrawal of Gautier and the Parnasians from the daily preoccupations of men indicates the first serious disintegration of an age old convention regarding the position of the author in the social group. When language was first being forged through a process of isolating tonal and sound symbols for emotional experience, the creator of new words and new verbal rhythms experimented in the presence of his fellow tribesmen, gauging the success or failure of his experiments by the response of the listeners. Similarly the welding of discrete verbal clusters into sustained conceptual patterns, such

as riddles, charms and proverbs, was an organic development conditioned by the immediate interplay between the collectivity and the verbal-rhythmic craftsman, irrespective of whether he had acquired a specialized status as medicine man or priest or was still an impromptu entertainer and exhorter. In such a literature anonymity was the prevailing convention, since the emotional or religious value of the words rested upon their authority as expressions of the collectivity rather than as the personal creations of an individual.

Between this crude, more or less spontaneous literature, concerned primarily with the bewilderment of primitive man in the presence of the mysterious and hostile forces of nature, and the fully matured self-confidence of the anthropocentric epic lies a nebulous period of tribal development. At the end of the transformation emerged the clearly individualized figure of the tribal chieftain, around whose person revolved the major currents of tribal activity, political, military and cultural. Increasingly aware of his distinctive position in the tribe, he found a useful agent in the person of the literary craftsman, who had likewise come to occupy a more specialized status in the group.

Although it is no longer believed that the Homeric cycle was transmitted orally from one generation of bards to the next, the actual rendition in the court of the chieftain took the form of a recital accompanied by music and usually interspersed with formal, rhythmic dancing. At such a stage of literary development there was no clearly drawn distinction between the creative craftsman and the reciter who might graft on to an inherited body of literature a few embellishments of his own. Through such interpolations the Sanskrit epic cycle grew in the process of transmission to even larger proportions than did the original nucleus of the *Iliad* or *Odyssey*. The concepts of originality and plagiarism were the offspring of a much later, individualistic age. Even in mediaeval Europe the distinction which has sometimes been drawn between the troubadour who created the poem and the jongleur who publicly recited it is somewhat of an abstraction, since the troubadour was often forced by exigencies of fortune to publicize his wares in person, while, on the other hand, the jongleur often introduced into his recitation a not inconsiderable amount of his own handiwork.

The essentials of the relationship between the heroic chieftain eager for personal or family

glory and the craftsman who could clothe these yearnings in a beguiling rhythm of sounds and emotions are discernible in the varied disguises which this relationship took throughout antiquity and the mediaeval period. The element of direct, personal contact may be illustrated not only by the Homeric bards but by the recitations of the Sanskrit *sūta*, the Anglo-Saxon *scop*, the Scandinavian *scald*, the Icelandic *sagamann* and the Celtic *file*. In each of these settings the economic and social position of the bard was intricately bound up with that of the tribal chieftain. It is no coincidence that in Anglo-Saxon poetry the epithet for king is "gold giver," or that the thematic rhythm of many of the early heroic poems was dictated in no small part by considerations of how best to stimulate the tribal chieftain to a pitch of magnanimity wherein he would part with a maximum of gold bracelets and gold rings.

The regime of the tribal chieftain may give way, as it did in Egypt, Babylonia, India and China, to a centralized imperial bureaucracy; or, as it did in Greece, to a group of urban autarchies, at first tyrannic and later democratic. In the former case the literary craftsman becomes a rather indistinguishable element of the public cultural institutions, being assimilated either into the entourage of the court, as in China, or into the religious and commercial oligarchy of Babylonia and Assyria or into the priestly and scholarly circles of Egypt. The more individualistic role of the poet in seventh and sixth century Greece is a reflection in a different sense of the disintegration of the older tribal values of heroism and self-sufficiency. In a period of spiritual disillusionment, growing class antagonisms and political insecurity the literary craftsman was called upon to soothe the minds of troubled tyrants. The bibulous, aphrodisiac lyrics strummed out by Anacreon of Teos at the banquets of Polycrates, tyrant of Samos, are an example of escapism, comparable to the songs of Alcaeus and Sappho in strife ridden Mytilene. When toward the end of this long period of transition between the Achaean and Athenian civilizations the constitutional oligarchs were replacing the tyrants, Pindar served the aristocratic cause more intelligently by bringing the beauties of poetry from the banquet hall to athletic celebrations and civic ceremonies less remote from the restless populace.

The popularization of the Pindaric ode and the transformation of the rural dithyramb into

the drama paved the way for a literary form still better adapted to the amusement and edification of the democratic citizenry of Athens. Under Pericles the role of the literary craftsman underwent a significant modification. The outstanding dramatists, regarding themselves primarily as public spirited citizens, whether on the battlefield, on diplomatic mission or in the theater, preferred civic acclaim, as expressed in the decisions of the popularly elected judges, to pecuniary reward. Since the dramatic medium had introduced a new element of expense, namely, the training of the chorus and actors and the scenic staging of the play, the wealthier classes assumed this indirect form of patronage, while the citizenry itself sometimes contributed sums of money to the writers. Even after the collapse of the proud spirited collectivity in the early fourth century, there is only scattered evidence of a return to the systems of patronage characterizing the ages of Homer and the tyrants. The later Hellenistic empire, reaching its highest level in the Alexandrian culture, is comparable rather to the early bureaucratic type of state; in both the literary craftsman is essentially a public functionary, who, like Callimachus, may combine his delicate, amorous verse making with graver responsibilities as supervisor of the museum. There may be found, however, one practise reminiscent of earlier systems of patronage—namely, the encouragement offered by new centers of culture such as Ephesus and Pergamum to literary craftsmen who were publicizing the legends of the locality.

The infiltration of Hellenistic culture into Rome may be attributed primarily to the material encouragement given by Roman aristocrats of the type of Scipio Africanus to the early exponents of Greek literature, such as Livius Andronicus and Ennius. The utilitarian values of a highly developed literature as a training school for the Forum and as a source of distinctive class culture insured adequate support to the early teachers and practitioners of literature; and despite the violent opposition of the less privileged classes in Rome and the rural aristocracy Greek literature had by the time of Cicero become firmly established. A native literature was still, however, to be forged. With the school of Roman poets which flourished under Augustus the relationship of the literary craftsman to the ruler enters upon a new phase. While Augustus may be said to have been like the more primitive chieftain in his desire for glory or like some of the Greek tyrants in seek-

ing to divert the populace from brooding on lost liberties, his delegation of the literary dictatorship to a person of the type of Maecenas was an innovation. It created a closely knit literary circle, conscious of a homogeneity of mutually stimulating aesthetic ideals which enabled the writers to overlook rather easily the more workaday realities of the patron-client relationship. The active critical judgment of Maecenas, like that of Pope Leo x in Renaissance Rome or of Lorenzo de' Medici in Florence, was a determining influence on the work of the literary craftsman in quite a different sense from that exerted by the Anglo-Saxon chieftains assembled in the beer hall or of the Dorian and Ionian tyrants reclining at their banquets. With the passing of Maecenas and the Augustan literary circle and the rise of a parvenu class of rentiers and *fermiers*, eager to vest itself with the paraphernalia of literary culture, the more disagreeable features of the patron-client relationship became increasingly evident. The gibes of Martial and Juvenal at the poetasters who glutted the client market and at the insensitive, calculating patrons who hoped to buy at not too great outlay the immortality promised by poets are prophetic of a later age.

The main features of the evolution of Roman patronage are repeated in Renaissance Italy and early seventeenth century France. The desire of the fainéant nobility for immortality brought an increasing number of writers to the aristocratic and papal courts to haggle over the price of a literary commission. Despite their fulsome dedications the Elizabethans managed to escape this menial attitude, thanks in large part to the fact that many of the leading writers enjoyed a source of revenue from the booming theaters but also to the more intelligent interest of the English commercial nobility, which in addition to lending the prestige of its name often, as in the case of Spenser, secured congenial sinecures for the more promising poets. The easy familiarity characterizing the relation between writers and patrons in the neo-Augustan age of Dryden and Pope and the mutually stimulating contacts of the literary circle and the political aristocracy were paralleled not only in the group around Maecenas but also the French literary group dominated by Boileau and accorded for a time official state support by Colbert. But with the rise to power of the "barons of the bags" under Walpole and among the bankers of Paris, the atmosphere of sincere and

intelligent appreciation characterizing these literary circles was lost. The thunderings of Johnson in England and d'Alembert in France against the abuses of patronage mark the end of a literary institution which was being undermined by deeper economic currents than either assailant suspected.

Hitherto the literary craftsman had exercised an unmistakable function in the social process; he was an integral unit in the life of the leisure class, most at home in the highest political and intellectual circles. He had dramatized Socratic individualism; rationalized the Caesarism of Julius and Augustus; fired the spirits of the legions of William the Conqueror at Hastings; associated on terms of the closest intimacy with the sons of Frederick Barbarossa; followed the troubadour king, Richard Coeur de Lion, to the crusades; adorned the metaphysics of Thomas Aquinas; filled the Florentine populace with an unreasoning enthusiasm for Lorenzo de' Medici and the restless masses of London with love for the Virgin Queen. In the Sicilian court of the most idealistic and cultured of the Holy Roman emperors he had led the life of a highly prized bureaucrat, whose function it was to perfect new literary forms, such as the sonnet, more adapted to the rhythms of the popular tongue of modern man; at the courts of Marie de Champagne and Eleanor of Poitou he had sentimentalized a disintegrating feudal order and in an age of domineering women and crusading husbands evolved a ritual of love which elevated the lady of the manor to the level which befitted her; in the Wartburg castle of Count Hermann of Thuringia, the most illustrious and intelligent of the German mediaeval patrons, he had fired the spirit of Germanic chivalry.

During all this earlier period the literary craftsman proper, like the leisure class of which he was an integral part, was not deeply involved in the emotional life of the productive masses. To be sure, theatrical art, being by its nature more popular, had directed its appeal to a wider group. But genuine theatrical activity had been confined to a few periods—either periods of democratic enthusiasm, as at Athens, or of an incipient, untutored culture, as in early Rome; or periods marking the emergence of an unlettered class, such as the guild burghers of fourteenth and fifteenth century France. The non-theatrical craftsman, with a few negligible exceptions, such as the popular feuilletonists in Alexandria or the minstrels of the populace in India or the *Spielmann* in mediaeval Ger-

many, was the product and mouthpiece of a leisure class, which filled its earthly span with religion, warfare, politics, learning and love. The crumbs of literature which fell from its table to the productive masses went unnoticed.

By the time of Dr. Johnson and d'Alembert the older economic relationships had undergone a deep transformation: the full effects of the commercial revolution were already felt, and before their deaths the industrial revolution was gradually beginning to gain momentum. The happy experience of Addison and Steele with the *Spectator* and the *Tatler* and of Edward Cave with the *Gentleman's Magazine* had proved to the satisfaction of even the most skeptical eighteenth century book publishers that there was a reading public eager for congenial literature. Under the stimulus of the popular revivalist movements, such as Wesleyanism, and of the insistence of democratic utilitarianism on popular education, a progressively larger section of the productive masses was drawn into the literary process. At the same time the dominant groups within the new nation states became involved in an increasingly complex economic system, which computed its values in terms of price.

The effect of these basic economic forces on the literary craftsman was twofold. The dominant social groups, absorbed in their daily responsibilities in the system of entrepreneurship, found little place in their immediate circle for the man of letters. Deprived thus of his vital contacts with the dynamic elements in the social process no less than of his leisure status, he turned either in a spirit of resignation to the fainté remnant of a precapitalistic age or, if of a more realistic temperament, set out to orient himself more accurately in terms of the various levels represented by the enlarged reading public.

Although he had assumed a professional status on the periphery of the price system the author's sense of immediate contact with the other members of his profession decreased. The small literary circle of Augustan poets and critics was a self-contained, exclusive unit. Critical standards, based on intricate rules of composition and presupposing an intimate familiarity with the rather inaccessible texts of earlier masterpieces, closed the gates in the face of the overpresumptuous. The Horatian idealization of the poet as a civilizer, a being apart, akin to Cadmus, was perpetuated throughout the Renaissance and served even later to discourage

the vulgar interloper. With the gradual release of individualism accompanying the break up of feudalism the task of the critical oligarchs became increasingly difficult, as can be gauged by the vehemence of Boileau and Dryden and Pope against the fumbling hangers on in the republic of letters. With each new stage in the spread of individualism the impossibility of the task became more manifest. The declining appeal of ecclesiastical and military careerism sent a growing number of recruits into literature, ill adjusted to their social system but unfitted also for their new profession. At the same time the implications of the newly proclaimed doctrine of the "career open to talents" were drawn by an ever mounting number of ambitious and penniless youths. With no organic group center around which to cluster writers followed the general drift to the cities, where they broke up into artificial groups bound together by the miseries of Grub Street or at a later date by the Bohemian atmosphere of the Parnasse cénacles.

The proliferation of literary and intellectual groups was accompanied by an unprecedented demand for printed edification and amusement. The older public ceremonies which hitherto had beguiled and as a rule edified the populace—religious rituals on the Acropolis and at Chartres, gladiatorial contests and circuses, festas and endless saints' days, mimes and miracle plays, tournaments and bear fights—were fast giving way to the industrious drabness of Manchester. While the middle class turned in ever increasing numbers to the mirror of literature in search of an idealized reflection of its virtues and ambitions, those in the smoky tenements sought in literature only a brief opiate from the day's drudgery. The majority of modern writers, like the majority of modern readers, have been drawn from the contented middle class. Through the medium of the novel author and reader, turning from kings and nobles, have peered into the everyday lives of their neighbors, gazed upon the pleasant face of nature, shared their ideals of love and earthly fame, discussed their problems of love and marriage. The success of the early novelists, notably Richardson and Jane Austen, soon established a mold which has required but little modification in its adaptation to the demands of large scale literary production. To the more determined of the standardized profession of letters have been accorded wealth and veneration, and to the less talented at least their daily bread.

The escape from this prevailing preoccupation with homely matters has been furnished by the literature of adventure and illicit romance, which lightens the drudgery looming in the shadow of Manchesterism. The children of those toilers who at an earlier stage found diversion and comfort in the exploits of Jacob and Gideon turned to the new supplies of adventure distilled from the lusts and crimes of an industrialized society or the lawless adventure of a frontier in process of exploitation. Reynold's penny romances of the 1830's, the paper covered volumes of Nick Carter and Jesse James, the pulp magazines of the subway age, have brought flashes of release to the millions who have preferred to forget their own lives.

Like the submerged group of readers, a small literary layer much nearer the apex of the social pyramid has sought escape in a variety of ways from middle class standardization. Shelley, Matthew Arnold, Flaubert, Ibsen, Shaw, the latest group of formalists—all these and many more have reviled the standards of Philistinism and of Philistine literature. The romantics sought escape in a neo-Prometheanism or mediaevalism or pantheism or revolutionary oratory; the Parnassians sought it in the religious literature of India and Persia and early Greece; the de Goncourts and their maladjusted French and English followers in the literature and art of the Orient; the symbolists in the nebulous melopoeia of delicate, half formed images; the formalists in the ferreting out of new verbal masses and rhythmical patterns; the transitionists by blasting the word itself.

This upper group has in the nature of things been the most articulate in rationalizing its pretensions and predilections. The modern conception of literature may be said to be in large part its handiwork. It has been openly suspicious of literary mass production and amused by the lower reaches of literary output. Against the modern traffic in books it has sought to set up standards based on literary tradition or aesthetic rationalism. Unconvinced by the utilitarian argument from numbers, it denies that "pushpin is as good as poetry" and measures its audience in terms of centuries rather than publisher's sales. The attempt of this self-conscious group to leaven the inert mass of functional readers by familiarizing them with laws of taste of a less ad hoc nature has not materialized. The dogmatic assurance of "Augustan" criticism, buttressed by the prestige of

a functioning social group, finds in the modern period a few nostalgic exponents, but ex cathedra judgments, even of a Brunetière or an Eliot, have only a limited carrying power. For among the inalienable natural rights of the modern individual is that of knowing what he likes. The attempt of the impressionist critics to tell him why he likes it or why he should like something else more seemed for a time, in the hands of an Addison or a Hazlitt, to give promise of elevating the public taste. But the unpretentious, conversational tone of the impressionist critic soon came itself to be commercialized and vulgarized. The growing lists of the publishers on the one hand and the growing numbers of those who want to write on the other have resulted in the tremendous expansion of the group of literary intermediaries known as book reviewers. Ranging from esoteric literary reviews to boiler plate columns and to rural weeklies, the realm of criticism has come to display as violent cleavages as are found in the reading public and among the authors who try to anticipate its tastes. In an age of blurbs, literary teas, book clubs and Christmas trade publicity the critic's impressions of the adventures of his soul among masterpieces tend to gather irrelevant values; while the lamentations of the minority which still persists in thinking of the intrinsic values of literature grow proportionately fainter.

The dual problem of sociological criticism—the social conditioning of literary creation and the impact of literature on society—has received varying emphasis and neglect in the long history of critical exploration. Greek criticism was cut off from any real consideration of the creative process, either in social or psychological terms, by reason of its contempt for any non-Greek variant and its tendency to take its own body of literature for granted. When Aristotle formulated his doctrine of mimesis, or the imitation of nature, the Greek masterpieces were already in existence. The rules of literary composition, set forth in the *Poetics* and the *Rhetoric* and repeated with minor variations by the long succession of Aristotelian critics, were at the outset arrived at in large part by an inductive process of analyzing existing models. But once arrived at they were universalized, and in the hands of an intelligent literary craftsman these axioms of composition were deemed adequate to convert the world of nature into the realm of art. The intricacies

and problems of the intermediate personal process were minimized and glossed over. The major energies were directed to a classification of types of literature and the differentiation between faults and merits in composition. The tendency to ignore the processes of personal creativeness was emphasized by the fact that Greek literature was collective in inspiration and traditional in form, and that since his material lay in the tribal tradition the poet was merely the craftsman molding it into literary form by well attested rules.

The influence of the Aristotelian approach lay over western critical thought for two thousand years. Some of the later Hellenistic aestheticians, notably Longinus and the neo-Platonists, stressed imagination in the creative process and revolted against the sovereignty of overformal rules. But although its importance was revived by modern thought, the movement was at best a minor insurgency. In Rome, where the task of the critic was bound up with the profession of the teachers of rhetoric, the rules of composition became increasingly meticulous. But they were oriented primarily toward preparation for the public career. In the hands of a critic who was himself a literary craftsman, like Horace, the rules were fashioned into an *ars poetica* in which the factor of *ingenium* was taken for granted and forthwith dismissed. Neither in Horace nor in the numerous Horatians of Renaissance Italy and seventeenth century France was there any sustained interest in any portion of the literary process except the end product. The new interpretation given to the Aristotelian mimesis by certain Renaissance critics, such as Vossius, according to which the masterpieces of antiquity took the place of nature as the proper object of imitation, left even less reason for concern with the complexities of the creative process. The Atheno-Roman logic of *barbaroi*, reinforced by the thrill of the classical revival and the consciousness of succession to the ancient tradition, enabled the sixteenth century Italian critic to generalize and prescribe with the assurance of old. This critical absolutism persisted even into seventeenth century France, which conscious of its intellectual hegemony in Europe was persuaded that the mantle of Rome had settled with providential fitness on its shoulders. The deeper lying drives, the cultural and intellectual forces at once stimulating and conditioning the task of writing, remained outside the realm of exploration.

But the second aspect of sociological criti-

cism—the impact of literature on society—was given rather extended attention. Plato wished to banish poetry utterly from the Republic because it could be intoxicating to its victims and interfere with the more serious pursuits of life. And without sharing Plato's passionate outburst against the poet the classical world agreed that literature had a marked social incidence. The poet was *morum doctor*, and the orthodox version of his social function is expressed in Horace's *delectando pariterque monendo*. The Achæan heroic type presented in Homer, combined with the more mature wisdom characterizing the gnomic poems of the Seven Sages, the odes of Pindar and the dramas of Sophocles, presented undoubtedly a pattern of self-reliance and moral restraint that may have been found useful to the stability of the Greek polities in periods of transition and disintegration; the hold that Euripides had on the imagination of the Hellenic world served something of the same function in the direction of political amity as Shakespeare is said to have served among English speaking countries; and the tory diatribes of Aristophanes against the individualism of Euripides as an important factor in the disintegration of the older tribalism are evidence of how the Greek mind was occupied with the social impact of literature. In other cultures similar instances may be cited—the attempt made in the *Bhagavadgita* to bolster the Indian caste system by propaganda stressing its justice and sanctity and directed to the farmer, the soldier, the shopkeeper; and Vergil's idealization of a farmer's life in a period of chaotic agrarian unsettlement as well as his intent to fashion a glorious heritage for an empire freshly welded out of dynastic struggle. The common element in most of these cases is the consciousness of the effectiveness of literature as a force making for order or revolt in a changing social organization or political system.

With the victory of Christianity a rigid moral and political instrumentalism—implicit, when it was not a conscious policy, in the new religious philosophy of life, and reacting against the decadence of Greco-Roman life in the empire—destroyed pagan literature where it could and placed its imprimatur only on what was edifying and expedient. The instrumentalism of an *ecclesia militans* was followed in due course by a diluted but oppressive moralism, finding its strongest expression in sixteenth century Catholicism and insurgent English Puritanism, which represented the extremes of moral revival

in the interests of religio-political struggle. And the endless harping on the moral beneficence of literature that is found in late Renaissance Italian criticism, along with the patient defense of literature by Sidney and the Elizabethan critics and by Congreve a century later, may be interpreted as a response to this pressure.

It is in eighteenth century critical thought that a distinct conception of the social conditioning of the literary process first emerges. The confluence of several appreciable forces, all working in the same direction, may serve as an explanation: the early environmentalism of the Renaissance and seventeenth century thinkers; the emergence of centralized nation states, building, and building upon, a feeling of nationality; the spread of literacy and literary effort; the growth of a middle class, emotionally bound to a native tongue and a native culture and skeptical of the fervor of the classical revival as embodying an aristocratic snobbishness. All these forces combined to produce a movement of literary criticism which threw its major emphasis on the organic unity of the national literature with the national culture. Wotton and Hume in England, Dubos and Condillac in France, Kant, Hamann and Herder in Germany, may be selected as exemplifying the variety of approaches to the problem. The movement took at first the form of a debate as to the relative merits of the "ancients" and the "moderns," and later the mediaevalist strain, represented in England by the writings of Hurd and the Wartons and in Germany by Gottsched's and Herder's continuation of an older mediaevalist strain, harked back to the glories of the national literary past. But neither the bitterness of the Battle of the Books nor the pressure to bolster the national pride against the Gallic pretensions to cultural hegemony is of primary significance: the chief importance of both lies in the fact that they suggested the outlines of a critical method which related the body of literature—of both a nation and a period—to the conditioning geographical, racial and political factors. From this followed the position, adumbrated in the Elizabethan period by Daniel's *Defence of Rhyme*, and given characteristic expression in Warburton's answer to Shaftesbury's criticism of Hebrew poetry: no literature, insisted Warburton, could be judged except as the critic placed himself in the position of the audience for which it was intended. The underlying assumption of this group was that a literature which had evolved organically out of

the matrix of a society held more possibilities of greatness for that society than did an alien importation.

This early insurgent environmentalism was developed more scientifically in the nineteenth century and became the prevailing conception of literature. It was used to good effect by the romanticists in their struggle to displace the classicist position. Chateaubriand's mediaevalism had had considerable contemporary influence; and Madame de Staël, who was conversant through Friedrich Schlegel with Herder's literary nationalism, published studies of the German temperament and literature in her *De la littérature considérée dans ses rapports avec les institutions sociales* (1800) and her *De l'Allemagne* (1813), which were received with acclaim and were widely imitated. Along with the even more brilliant outpourings of the creative romanticist poets and dramatists, they marked the overthrow of the long intrenched classical absolutism. Rousseau's dictum that the only absolute truth was that there was no absolute truth had by 1830 been transmuted into a generally accepted axiom. Romanticists such as Wordsworth and Hugo developed a critical interest in the creative process of the individual writer, for the study of which a path had been blazed by the sensationalist psychology of Locke, by the emphasis placed by Shaftesbury on the dynamic and emotional elements in the literary creative mind, by the speculations of Home in England and Baumgarten in Germany on the nature of the creative process—developed more systematically in Herder's analysis of *Idiotismus*—and by the vogue of individualism and sensibility ushered in by Sterne and Richardson. This interest, taking the form of the cult of the genius and emphasized to the exclusion of all other factors, combined eventually with the complete formalism of the "art for art" school. The environmentalist position, on the other hand, building on Darwinism and Comtism and on the sharpening of scientific method, was extended to a more precise analysis of the social forces conditioning literary creation. Its most characteristic expression is found in the famous trilogy of Taine, in which he classified the environmental influences under *race*, *milieu* and *moment*. Brunetière displays even more markedly the tendency of this later type of environmentalism to eventuate in a reassertion of superpersonal standards.

The emphasis of the scientific critics on broad environmental determinants and the preoccu-

pation of the more introspective of the romantic poets with the individual creative mind were accompanied by a third approach to the literary process. Although thoroughly conversant with the environmentalist position the democratic humanitarians and socialist utopians of 1830, reacting against the laissez faire indifference of the Benthamites, emphasized the role of literature in the task of fostering the spiritual and emotional welfare of the unprivileged masses. The sentimental humanitarianism which had begun in the eighteenth century and received a stimulus from the writings of a number of the romantic poets, as, for example, Shelley and the early Wordsworth, deeply colored the conception of literature voiced by Saint-Simon, Proudhon, Fourier and Comte in France, Kingsley and Ruskin in England and Bielinsky and Chernechevsky in Russia. This emphasis on the social role of the literary artist is essentially a perpetuation of the older classical and Renaissance attitude adapted to the social problems of an industrialized society.

In reaction against this exclusive concern with the civic functions of literature a group of younger writers headed by Gautier set out to shift the emphasis back to what it regarded as the essentials of literature. The various forms assumed by the art for art movement among the successors of Gautier, especially in France and England, sought to focus attention on the peculiar problems distinguishing the work of the literary craftsman from that of all other types of thinkers and writers. This led both to the cult of the genius and to formalism, which devoted itself exclusively to problems of literary technique. In both cases the pretensions of the scientific environmentalists to explain away literary masterpieces were repudiated. This anti-environmentalism has varied from the annoyance of Whistler to the reasoned skepticism of Pater and to Croce's emphasis on intuitive phantasy as the only genuine factor in the creative process.

Until recently these varying conceptions of literatures, which may be traced from Plato to Cocteau, have proceeded on the whole undisturbed by authoritarian intrusion. The victory of the Bolsheviks over the White armies in 1920 and the subsequent consolidation of the U.S.S.R. have brought the question of literature out of the realm of theoretical abstraction and converted intellectual polemics into revolutionary partisan warfare. As an insurgent movement Marxism directed its major efforts

to the overthrow of bourgeois society according to the scientific system laid down by Marx and elaborated by Engels. The necessity of propagating the cardinal doctrine of the class struggle had directed attention to the potentialities of the written word as a revolutionary weapon, but the question of the origins and function of literature in its higher ranges was not a pressing one. Dialectical materialism in laying out systematically the materialistic foundations of the ideological superstructure developed the environmentalist position with marked precision; but Marx himself did not attempt to apply its methodology overrigidly to the masterpieces of literature. A devoted reader of Aeschylus and Shakespeare, he also found relaxation in contemporary bourgeois literature, especially in the works of Balzac, which he intended to criticize at his first leisure. He felt no hesitancy in emphasizing, in the appendix to *The Critique of Political Economy*, that "certain periods of highest development of art stand in no direct connection with the general development of society, nor with the material basis and skeleton structure of its organization." Later Marxian scholars, of the type of Labriola and Plekhanov, have also been inclined on the whole to emphasize that the dependence of literature and the arts on the underlying modes of production is less directly traceable than is the case with political and legal ideologies and institutions. Since even to the present day no systematic attempt has been made to subject the workings of the creative process itself to the methodology of dialectical materialism, the Marxian interpretation of literature has laid itself open to the same charge that Saint-Beuve brought against Taine's environmentalism—namely, that it tended to ignore the technical and psychological elements distinguishing the literary craftsman.

The October thrust to power basically altered the emphasis of Marxism; unlike Engels or Liebknecht, Lenin was confronted with the task of organizing a proletarian culture. Between the present and the ultimate goal of a classless society was to be a period of transition of indeterminate length. Unlike Trotzky, Lenin refused to conceive of this period as essentially a brief and uncultured interlude of blood and sweat. The deterministic implications of Marxism insured that the struggles of the immediate future would inevitably reflect themselves in a new culture, while the dialectical elements indicated that the fostering of culture, especially in the realm of the written word, would

forward the consolidation of proletarian power. In such a program the role of bourgeois literature became a consideration of state.

Although Lenin, like Marx, felt no hesitation in expressing his fondness for the bourgeois masterpieces of the past and even his preference for Pushkin over the revolutionary poet Maikovsky, the activities of the various heterodox literary groups carried over from the aesthetic circles of the late empire continued to bring to the fore the question of bourgeois literature. In the early period of military defense and consolidation little attention was paid to the "decadent bourgeois" groups which assembled in the cafés to discuss the ramifications of imagism and formalism. The attitude of patronizing tolerance toward them which persisted even after the cessation of civil war is typified in Trotsky's lecture to the formalists, wherein he attempted to orient their abstract views against the concreteness of dialectical materialism. Most of these schools, like so many of their counterparts in post-symbolistic bourgeois societies, were essentially one-man movements and died out naturally with the death of the leader; while in other cases the leaders of the asocial extremists found themselves gradually drawn from the poetic laboratory closer to the factory.

The problem of the bourgeois "fellow travelers" continued, however, to be a storm center. Since it was widely assumed that Marx and Lenin had established the fact that bourgeois literature was a reflection of bourgeois society, it followed that the writings of an ex-bourgeois group constituted a hindrance if not a danger to the carrying out of proletarian ideals and proletarian program. The struggles of such groups as the All Union Association of Proletarian Writers (V.A.P.P.), the *Na Postu* and the aggressive Proletcult of Bogdanov to set up a cultural dictatorship directed to the eradication of subversive bourgeois literature and art, took the form primarily of attacks on the "fellow travelers." In 1924 the government in order to put an end to introverted literary polemics, issued a series of formal resolutions repudiating the pretensions of any group to literary hegemony, laying down the broad principle of free competition of aesthetic ideas and recommending to the proletarian groups that they learn from the better trained bourgeois literary craftsmen the refinements of technique and at the same time inculcate them more zealously with the essentials of proletarian ideology.

The reversal during the 1926 crisis of the

government's earlier position may be attributed to the impolitic behavior of the "fellow travelers" themselves. Convinced, like many engineers and intellectual experts of the period, that the persistence of the NEP was the herald of a return to the old order, the spokesmen of the right wing literary groups were heartened to express in literary forms their newly revived hopes. Confronted with what bore the marks of a major crisis the government retaliated by organic pressure which soon communicated itself through efficiently functioning Soviet channels not only to critical but to mass opinion. Auerbach, personifying the hitherto restrained rancor of the antibourgeois groups, became the literary man of the hour. The bourgeois suspects continued as editors of their literary magazines but unimpeachable proletarians were introduced as assistants. The books of the "fellow travelers" continued to be published, but the universal chorus of disapproval, ranging from critical journals to factory literary circles, drove the authors either to silence or to more unequivocal participation in proletarian programs.

The sense of increasing security, which mounted with the startling success of the Five Year Plan, and the growing indications of a more genuine proletarianization of the bourgeois literary group led on April 23, 1932, to an official resolution liquidating the V.A.P.P. and its affiliated branches which had persisted in their literal minded version of proletarian culture and literature. With the growing sense of well being, there has been manifested recently a general disposition to relax. As the second Five Year Plan draws nearer, there begins to appear even a tendency to suggest the dangers of hyperasceticism and exclusive preoccupation with superpersonal values. At a stage when some of the non-exploitational amenities of bourgeois life—love, romance, flowers, silk—find gracious apologists, the boggy of bourgeois literature is being gradually laid. Stalin like Marx finds relaxation in Shakespeare, whose works he recommends as correctives to the overprolific manufacturers of ill constructed social tracts.

The role of the Russian Revolution in bringing literary theory from the library and seminar to the public forum has extended to most of the larger countries of Europe and America. The proletarian movements have varied in strength, ranging from that of Germany through those of Austria and Hungary to those of the United States, France and England, where the goal of

the dictatorship of the proletariat seems as distant as it must have seemed to Engels. But even where the actual movement is weakest the widespread interest in the Five Year Plan and the growing hold of proletarian ideology on critical and intellectual circles have given a new orientation and note of actuality to the various conceptions of literature. Especially in those countries such as the United States and England where the methodology of historical materialism had not already become part of the climate of opinion, the possibilities of the so-called Marxist interpretation of literature have attracted not a few literary critics and historians.

The problem of the proper attitude for proletarian literary groups in these various countries toward "the fellow traveler" revolutionist writers who seek affiliation with them has been solved on the whole in essentially the same spirit as in Russia itself. The dangers from the ideologies of right wing socialist groups as represented by Kautsky and Vandervelde and of dissenting communist groups, such as Trotsky's, are of course much stronger and have been fully appreciated by the International Union of Revolutionary Writers. The criticisms heaped by the conference at Kharkov in 1930 on Henri Barbusse's journal *Monde* for opening its columns to ideological renegades are sufficient evidence of the unwavering attitude displayed toward any vital manifestation of heterodoxy. But almost as serious as right wing heresy from the point of view of the more intelligent leaders of proletarian literature is left wing sectarianism, which insists on closing the door tight against all would be revolutionary writers of bourgeois or petty bourgeois origins. The necessity of reeducating the revolutionary affiliates and of gradually eliminating false ideology is stressed as one of the primary responsibilities of the genuine proletarian writer groups. Outside of Russia the best organized groups of proletarian writers are to be found in Germany, Austria, Hungary and China, although the nicely balanced attitude displayed toward bourgeois revolutionary writers by the proletarian literary groups of Japan was especially commended at the Kharkov Conference, where plans were laid for extending the influence of the International Union of Revolutionary Writers to the backward colonial areas which were beginning to display increasing signs of a revolutionary activity. Although the United States played a comparatively insignificant part at the conference, the intervening two years of depression have swelled

considerably the ranks of bourgeois writers sympathetic with the proletarian movement. In a number of cases the attitude displayed by members of this group toward the question of bourgeois literature has been more uncompromising than that of the less inexperienced Russian leaders. Moreover, in the ever growing literary skirmishing over the implications of class literature, the tendency to identify Marxianism with economic determinism has produced not a little confusion and disagreement as to the most valid conception of literature.

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See: LANGUAGE; WRITING; LITERACY AND ILLITERACY; PROPAGANDA; PRINTING AND PUBLISHING; COMMERCIALISM; CRITICISM, SOCIAL; THEATER; FOLKLORE; MYTH; ROMANTICISM; MEDIAEVALISM; MATERIALISM; NATURALISM; REALISM; MODERNISM; HUMANISM; CLASSICISM; DECADENCE; DETERMINISM; ENVIRONMENTALISM; FUNCTIONALISM; NATIONALISM; INDIVIDUALISM; CULTURE; INSTITUTION; TRADITION; INNOVATION; MORALS; CENSORSHIP; CLASS; FEUDALISM; CHIVALRY; ARISTOCRACY; MIDDLE CLASS; PROLETARIAT; CLASS STRUGGLE; WOMAN, POSITION IN SOCIETY.

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LITTLETON, SIR THOMAS DE (c. 1407-81), English jurist. Littleton was the son of a distinguished Worcestershire family. Little is known of his early life. In 1450, having already achieved distinction at the bar—he had been escheator and undersheriff of Worcestershire and recorder of Coventry—he became the first reader to the Inner Temple; in 1455 he was appointed king's serjeant. He seems to have taken no part in political struggles and was little disturbed by the changing fortunes of York and Lancaster. From 1466 until his death he was judge of the Court of Common Pleas.

Littleton's reputation rests chiefly upon his treatise on *Tenures*, one of the first books printed in London and the first and perhaps the most famous treatise on English law. This must have been written shortly before the close of his life, for it was published in 1481 or 1482. More than seventy editions appeared before 1628, when Coke published his scarcely less famous *Commentary upon Littleton*, and about twenty subsequently; of Coke's commentary twenty-five editions appeared.

Littleton's *Tenures*, unlike the earlier treatises of Glanville and Bracton, is a purely English work, dealing only with the common law of England. It shows no trace of the influence of civil law codes or writers. It was the first attempt at a scientific classification of land rights and

gives a thorough description of English mediaeval land law before the recognition of equitable rights. The book became not only the foundation of the law of real property in England but also the textbook through which for almost two centuries students received their introduction to the law. Although Littleton refers to some reported cases to illustrate the principles which he lays down he works chiefly by means of typical, hypothetical cases. Exhibiting no ontological or philosophical curiosity, it is a book for lawyers only and as such is a superb performance, simple in style, orderly in arrangement and precise in expression.

W. R. VANCE

Consult: Wambaugh, Eugene, biography in his edition of *Littleton's Tenures in English* (Washington 1903) p. xi-lxvi, with bibliography; Holdsworth, W. S., *History of English Law*, 10 vols. (Cambridge, Eng. 1922-32) vol. ii, p. 571-601; Hicks, F. C., *Men and Books Famous in the Law* (Rochester 1921) ch. iv.

LITTRÉ, MAXIMILIEN PAUL ÉMILE (1801-81), French philosopher, scholar and politician. Littré began to prepare for a medical career, then turned to the study of philology and linguistics. Of a deeply ingrained republican persuasion, he participated with the university youth in the revolution of 1830. The problem which his many sided interests presented was finally solved by his entry into political and scientific journalism. His most important productions as a writer were his works on the French language, particularly his *Histoire de la langue française* (2 vols., Paris 1862; new ed. 1863) and *Dictionnaire de la langue française* (4 vols. with supplement, Paris 1863-77). In social thought he is of significance as an organizer rather than as an innovator. About 1840 he entered into association with Auguste Comte and thereafter became Comte's most prolific and perhaps most distinguished French disciple, contributing greatly through his articles in the liberal paper *National* to the exposition and popularization of positivistic ideas. The form of positivism to which Littré adhered was that expounded in Comte's first great work, *Cours de philosophie positive*. After Comte became interested in the propagation of a religion of humanity Littré repudiated him and remained faithful to the original scientific principles of positivistic philosophy, for the dissemination of which he founded the *Revue de la philosophie positive* in 1857. On certain points Littré differed even from Comte's first phase. He accepted Comte's two fundamental laws, that of the three stages and of the evolution of the sci-

ences in the order of decreasing generality. Lacking the profound mathematical training of his master he inclined, however, to view their operation as a biological process which advanced by slow, imperceptible transformations. In the history of civilization he accorded science a more important place than did Comte; but in the history of knowledge, while he embraced Comte's view of science as the final goal of intellectual progress, he believed that scientific problems must be clearly demarcated from those of metaphysics. As a writer on political subjects and as a moralist Littré was even further from Comte. His essential political tenets were liberalism and anticlericalism; and he occupied himself in later life with the highly practical problem of advocating a republican, lay, centralized government in France—the type of regime which the Third Republic was to realize. A rationalist in ethics, he held that the notion of justice, traceable to an innate respect for human equality and susceptible of unimpeachable logical demonstration, is the supreme principle regulating moral relations. The publication of his “*Des origines organiques de la morale*” (published in the *Revue de la philosophie positive*, 1870) and of the *Dictionnaire de médecine* (ed. by Littré and C. Robin, Paris 1855; by Littré alone, 1884) gave rise to charges of materialism. Monseigneur Dupanloup resigned from the French Academy upon Littré's entrance in 1871. In that year Littré was elected deputy from the Seine to the National Assembly, where he sat on the left. Through this position and through his writings he influenced the founders of the policies of the Third Republic, particularly Gambetta and Paul Bert, both of whom accepted positivism. The deep imprint of positivistic ideas, particularly with regard to scientific and ethical instruction, on the educational system inaugurated by the Third Republic and constructed by Bert in collaboration with Ferry and others shows Littré's influence, as the mark of post-Kantian ideas in the system can be traced to Charles Renouvier. No other thinker except Renouvier contributed so energetically as Littré to the shaping of the official philosophy of the Third Republic.

RENÉ HUBERT

Works: Littré's principal books on social subjects include: *Application de la philosophie positive au gouvernement des sociétés* (Paris 1850); *Conservation, révolution, et positivisme* (Paris 1852, 2nd ed. 1879); *Auguste Comte et la philosophie positive* (Paris 1863, 3rd ed. 1877); *La science au point de vue philosophique* (Paris 1873, 5th ed. 1884); *Études sur les barbares et le moyen âge* (Paris 1867, 3rd ed. 1874); *Fragments de philosophie positive*

et de sociologie contemporaine (Paris 1876); *De l'établissement de la Troisième République* (Paris 1880).

Consult: Caro, E. M., *M. Littré et le positivisme* (Paris 1883); Sainte-Beuve, C. A., *Notice sur M. Littré, sa vie et ses travaux* (Paris 1863); Ravaisson-Mollien, Félix, *La philosophie en France au XIX^e siècle* (5th ed. Paris 1904) p. 64-65, 92-96; Poey, André, *M. Littré et Auguste Comte* (2nd ed. Paris 1880); Robinet, J. F. E., *Le positivisme et M. Littré* (Paris 1881); Brennecke, Adolf, in *Deutsche Rundschau*, vol. xxxix (1884) 82-94.

LIVERPOOL, FIRST EARL OF, CHARLES JENKINSON (1727-1808), British statesman and monetary theorist. Liverpool's official and political future was determined by the fact that as a young man he became private secretary to Lord Bute. Thus he entered the company of the King's Friends, became an undersecretary of state in 1761, obtained a seat in the Commons and by ability as well as by influence climbed to many important offices, attaining the peerage as Lord Hawkesbury in 1786 and an earldom in 1796. When Bute retired from the Commons, Liverpool succeeded him as leader of the King's Friends. Under North he performed competent work as secretary at war (1778-82). Despite a certain odium in which he was held because of his reputed intimacy with the king he greatly influenced commercial policy under the younger Pitt. His thorough grasp of economic matters, reflected even in the fragmentary speeches of the *Parliamentary History*, made him Pitt's invaluable adviser; and the Irish Propositions, the French Treaty, the trade relations between the British colonies and the United States and Pitt's financial schemes were all in part fashioned by Liverpool's counsel. He was on the committee of the Privy Council which succeeded the old Board of Trade (1784-86) and in 1786 became president of a reconstituted Board of Trade and Plantations. In this office his dominant aim was to safeguard the shipping industry in the belief that despite the loss of the thirteen colonies England's power would be enhanced if she could retain the navigation of the New World. For this reason he opposed the abolition of the slave trade and radical changes in the navigation acts.

Liverpool's greatest contribution, however, was in currency reform. He was the leading advocate of gold monometallism, and it was mainly through his literary and personal efforts that the gold standard, which had already existed in England de facto, was given legislative recognition, first in the acts of 1774 which called for recoinage of gold coins and limitation of the legal tender of silver coins to payments not

exceeding £25 and later in the act of 1798 which prohibited silver coinage; the law of 1816 largely reaffirmed the principles enunciated in preceding legislation. His *Treatise on the Coins of the Realm* (Oxford 1805) presents the most convincing argument for the gold standard; it was republished by the Bank of England (new ed. by G. W. Birch and H. R. Grenfell, London 1880) during the bimetallist controversy of the 1880's.

ALEXANDER BRADY

Other important works: *A Collection of All the Treaties of Peace, Alliance and Commerce between Great-Britain and Other Powers; 1648-1783*, 3 vols. (London 1785).

Consult: Lecky, W. E. H., *A History of England in the 18th Century*, 7 vols. (new ed. London 1892); Namier, Louis Bernstein, *The Structure of Politics at the Accession of George III*, 2 vols. (London 1929); Wraxall, N. W., *Posthumous Memoirs of His Own Time*, 3 vols. (2nd ed. London 1836); Kalkmann, Philipp, *Englands Übergang zur Goldwährung im achtzehnten Jahrhundert*, Strassbourg, Staatswissenschaftlichen Seminar, Abhandlungen, vol. xv (Strasbourg 1895); Mannequin, T., in *Journal des économistes*, vol. xv (1881) 332-49; Schneider, John P., *Die Goldwährungs-Autoritäten* (Bremen 1881) p. 6-20.

LIVESTOCK INDUSTRY. Because of their importance to man cattle, sheep and hogs have constituted a vital factor in all civilizations. In antiquity they were an element not only in the food supply but also in artistic and religious activities. Today the American or European husbandman engages in the breeding, feeding and marketing of animals whose forbears were treated as gods or mythological heroes by the peoples of ancient civilizations. Up to recent times the livestock industry was definitely of a primitive nature. It was nomadic and pastoral and any commerce which resulted from it was never on more than an intracommunity basis. Animals were not bred carefully; although they were slaughtered for their meat they were utilized equally for their hides and wool, tallow and bones.

The livestock industry of the modern world is a direct result of the growth of towns, the industrial revolution and the oversea expansion of the late eighteenth and the nineteenth century. These changes in the economic life of the West made necessary the development of additional food resources, and new capital appeared to provide the means for the expansion of the livestock industry on more or less systematic lines in the great new lands of the Americas, Australia, New Zealand and South Africa.

Within these areas in the latter part of the nineteenth century there were a number of in-

fluences at work to speed the process of growth. The pioneer settlers leaving behind them the towns and villages of the seaboard penetrated into the great plains regions to carve out new homes and to engage in commercial agricultural enterprises. Here they found the conditions most suitable for the development of a livestock industry: corn and other grains sufficient to fatten livestock could be grown on the grasslands; in the range country there was ideal pasturage for millions of head of cattle and sheep. The entry of the railroads into the pioneer fringes provided transportation which linked the stock farms or ranches with the markets. The invention of refrigeration made possible the storage of meat supplies at centers after slaughter as well as the year round operation of packing plants; the latter in turn created a continuous market for the producer. The appearance of the modern canning industry permitted the utilization of livestock products in canned foods which could be kept indefinitely without deterioration. With the perfection of an adequate financing mechanism there emerged the large scale livestock industry with which the modern world is familiar. The result of all these factors has been that the peoples of the West, particularly those of the new plains countries and the industrialized nations of western Europe, have become consumers of meat stuffs in large quantities and that consequently beef, veal, mutton, lamb and pork have become significant in international trade.

Cattle. Beef cattle are the bulwark of agriculture. On the ranges and pampas they convert vast quantities of grass and forage into high grade meat, the value of which is greater than that of any other commodity which might be produced from the same raw material. Beef cattle fit admirably into the modern agricultural scheme: they require little care; they are not easily carried off by disease; and their proportionate consumption of cheap roughages and high priced concentrates is admirably suited to the crop rotations of ordinary farms. Besides their manure makes possible the retention and renewal of the richness and mellowness of the soil. Almost one tenth of the gross farm income of the United States comes from the sale of cattle, which at the peak of prosperity in 1929 amounted to about one billion dollars. This was almost as great as the income from hogs and over six times the income from sheep.

The estimated world population of cattle is in the neighborhood of 600,000,000 head, which

is as large as the total for sheep and two and one half times that for hogs. In commercial importance North and South America are the outstanding cattle regions of the world, although Asia, where cattle are comparatively unimportant for world trade, has a cattle population greater than that of North and South America combined. The following are the figures for the principal cattle countries with the year of census or estimate in parentheses: India (1928), 184,555,000; United States (1930), 57,978,000; Asiatic and European Russia (1930), 53,800,000; Argentina (1930), 32,212,000; Germany (1930), 18,033,000; Australia (1929), 11,301,000. Although the cattle of the United States number only one tenth of the world's supply, this country produces more beef than any other nation. This is largely due to the fact that the cattle of the United States are raised almost entirely for their meat; moreover by the use of pure bred sires beef production per unit of breeding stock has been increased to a point reached in but few other countries.

The tendency to greater density of cattle population in certain areas than in others is due to feed and climatic conditions and to the existence of a variety of racial customs regarding the consumption of beef and dairy products. A supply of proper feed is one of the limiting factors having a bearing on the density of cattle population. Thus in Argentina the production of cattle has developed rapidly since 1900, in considerable measure because of the discovery that animals could be stocked easily on the rich natural forage grasses of the country. Young steers are raised on grass until they are two to two and one half years old and are then removed to special alfalfa pastures for a fattening period of six months. Similarly, in the western plains area of the United States pastures have been found especially suitable for the grazing of cattle; while in the American corn belt a relatively dense population has been established as a result of the large supply of grain available for fattening purposes. In fact nearly 30 percent of all the cattle in the United States are to be found in the seven corn belt states of Ohio, Indiana, Illinois, Iowa, Missouri, Nebraska and South Dakota. There are also considerable numbers of beef cattle in the sugar beet and sugar cane regions of the United States, where these feeds have also demonstrated their suitability. While cattle may be found in both cold and hot regions they thrive best in the temperate zones.

In the United States cattle were introduced

into Florida, the lower Mississippi valley and the southwest by the Spanish and into the Atlantic coast section by the English and the Dutch. After considerable expansion in Virginia and the Carolinas cattle production was pushed out by cotton. Since the beginning of the nineteenth century cattle raising has constantly moved toward the west, seeking the areas of cheapest production. The early nineteenth century agrarian migration started cattle grazing in the Ohio valley, and cattle were driven over the Alleghenies to eastern markets. As corn production increased, this fattening area developed and cattle breeding was centered across the Missouri River. After the Civil War and during the decades of the 1870's and 1880's a scarcity of cattle in the north, due to the growth of the industrial population, and a surplus of cattle in Texas led to the driving of great herds north along what came to be a series of famous cattle trails; the era of the range cow country was thus inaugurated. As the railroads pushed west the cattle were driven to the termini, grazing as they went, and shipped east either for fattening in the corn belt or for slaughter in the packing plants of Chicago and Kansas City.

From 1870 to 1905 cattle ranching underwent a gradual metamorphosis. It was during this period that the western cattle industry was in its most picturesque phase. Covering a vast area which included the states of Texas, Oklahoma, Kansas, Nebraska, Wyoming, Montana, the Dakotas, Colorado and New Mexico; sparsely settled, ruled over by a hard riding and frequently lawless cowboy clan; a country of limitless plains and mighty rivers and stocked with wild game, western United States was exactly the place where great herds could roam with perfect freedom. Ranches not infrequently possessed as many as 80,000 head of cattle. Of the many customs that came to be associated with the industry on the open range the spring and fall round ups were the most interesting. The spring round up, lasting several weeks, was for the purpose of gathering together all the cattle for their enumeration, identification and distribution; the calves were branded and castrated; the mature steers were separated from the rest of the herd and moved to good fattening pastures until the fall. When the steers were between four and six years old they were trailed out and driven to the railroad termini.

Cattle thus existed on grass during both summer and winter. During the summer drought often played havoc with the herds; in winter

storms were the chief danger, for the cattle would then drift for miles in the snow and die by the thousands. It was not unusual for one fourth and sometimes one half of the herds to perish in this fashion. Losses from disease, from theft (or "rustling," as it was called) and from attacks by wild animals were also heavy.

This great and haphazard business of cattle raising, as it was carried on in the 1880's particularly, had all the marks of impermanence. Beginning with the second half of the decade a change began to manifest itself; following the terrible winter of 1887 the cattle boom definitely collapsed. The ranges had become overstocked as a result of the entry of great numbers of inexperienced persons into the industry. English and Scottish investors led on by oversanguine promoters had poured huge sums into the region to capitalize new ranching ventures. Quarantine laws passed by a number of western and central states prevented the free movement of the steers on the range; similar restrictions on the part of foreign governments cut sharply into the overseas demand for the plains cattle. The steady encroachment of homesteaders and sheep herders upon the open grazing lands and the resultant fencing of the range limited the cattlemen's field of operations. Inadequate credit facilities made the situation more difficult and the cattlemen, unable to withstand all these forces, were compelled to bow before the new conditions.

Since the early years of the twentieth century the cattle industry has undergone profound economic changes. The rising costs of land and fencing, higher freight rates and heavier taxes and capital charges have compelled the introduction of more efficient methods in the production of cattle on the range. To insure a water supply wells have been sunk, reservoirs built and windmills and gas engines installed. The use of pure bred and registered bulls has improved the quality of the herds. Finally, the industry has become definitely specialized with, broadly speaking, the following four general divisions: the maintenance of breeding herds which produce the calves; the production of stockers which are raised on the range and then shipped to the corn belt for finishing on grain; the fattening of these so-called feeders by farmers of the corn belt; the production of grass fed cattle on the ranges.

There are three systems in common use in the United States for the handling of these beef bred herds. Under the "straight beef" system the steers are grown out as cheaply as possible.

This method is adapted to regions where pasturage is plentiful and inexpensive, as in the United States, where it is the most widely practised form of beef production. Under the "dual purpose" system the cows are milked and the calves are raised on skimmed milk and supplemental feeds. This method is to be found most frequently in the general farming states. The "baby beef" system is a highly specialized method particularly adapted to the corn belt, where there exist both a good supply of feeds for fattening and ample pasture for the summer maintenance of the breeding cows with their calves. In these operations cattle growers naturally need the assistance of financial credits. In the United States particularly there has been developed a distinct agriculture credit mechanism having characteristics peculiar to the industry (see CATTLE LOANS).

The general methods of marketing cattle have shown little change in the past thirty or forty years. The great majority of the cattle marketed are usually billed direct by the owner, individual shipper or cooperative shipping association to a livestock commission firm located at a central livestock market. Upon their arrival the commission firm sorts the cattle and sells them to the slaughterer or speculator. There are, however, several other modern methods of marketing, of which the most important are: the direct sale to country drover for shipment to central market; shipment to central market through cooperative associations; shipment to central market direct; direct marketing to local butchers; direct sale either to a packer buyer or a speculator in the country or on the range to cooperative associations or on mail orders. Since the World War there has been a great increase in the numbers of cattle marketed through cooperative associations of livestock producers and through direct buying on the part of meat packers.

Sheep. Sheep raising has always been one of the world's chief pioneer enterprises. More than 600,000,000 sheep are distributed throughout the six land areas, the latest sheep populations for the leading countries being as follows: Australia (1930), 106,117,000; Asiatic and European Russia (1930), 100,600,000; United States (1930), 50,503,000; Union of South Africa (1930), 49,240,000; Argentina (1930), 44,413,000; India (1928), 35,506,000; China (1929), 35,000,000; New Zealand (1930), 30,841,000; United Kingdom (1930), 24,743,000; Spain (1929), 19,950,000. Within the past generation

the number of sheep has decreased in Argentina and the United Kingdom and increased in Australia, New Zealand and the Union of South Africa; there has been no significant change in the sheep population of the United States since 1900.

The distribution of sheep is materially influenced by the two general agricultural conditions of range and farm production and the two marketing conditions of the demand for wool and the demand for mutton and lamb. Of the ten leading sheep nations cited above Australia, Russia, the United States, the Union of South Africa, Argentina and New Zealand represent newly settled regions in most of which sheep production is still on the extensive or range basis; in China, India and the United Kingdom production is on a farm flock basis, where the flock is simply one element in the farm economy. Range production still persists in parts of Spain and in Hungary, while in the rest of Europe the farm flock method is generally common. Countries situated farthest from the world population centers emphasize the growing of wool because of its low transportation costs and its non-perishability. On the other hand, countries close to densely settled regions emphasize mutton and lamb production. Thus the largest volume of high grade wools comes from Australia and New Zealand, while the best quality carcasses are produced in the United Kingdom. In the United States the farm flocks in the corn belt and in the eastern and southern states carry largely mutton blood, while range flocks are chiefly of wool breeding.

Sheep were introduced into the American colonies at an early date and until 1850 were kept largely for their wool. During most of the nineteenth century because of the expanding needs of the New England textile mills the industry remained on a wool basis; and the number of western sheep, which were grown for this purpose, increased greatly. This was true particularly from 1870 to 1900. On the other hand, in the east the appearance of large manufacturing populations created a demand for mutton, with the result that sheep were grown for meat.

Range sheep, particularly in the southwest, were of low quality although they possessed traits that made it possible for them to survive in periods of long drought. On the northeastern edge of the range, in eastern Montana and Wyoming and in the Dakotas, the lambs could be stocked on the luxuriant grass and sent east as

feeders. The western sheep, very much like the range cattle, were run in large bands on the open public domain throughout the year. The industry was almost entirely in a pastoral stage; there was no investment in land or buildings; and the only capital outlays required were a camp outfit for the herder, which cost from \$200 to \$400, and the sheep, which were worth \$2 a head.

Like the cattle raisers the sheep raisers began to feel the pressure of range constriction on their industry and found it imperative to buy or lease lands in the grazing areas. In some cases this meant the acquisition of a sufficient number of small holdings in order to control watering places; in others it implied the purchase or lease of the greater part of the range. But the range operators had to give up the struggle and recent years have seen a steady reduction of their flocks. Today range sheep are to be found in the winter in the desert lands where water is available from the melting snow; in the summer they graze in the mountain regions.

Because of the increase in operating expenses the raising of sheep for wool alone has become unprofitable. The growing demand for mutton and wool, however, has made it possible for range operators to change from a strictly wool basis to one including lamb and mutton. As a result there has been developed a type of ewe capable of producing a good market lamb and a readily salable grade of wool. Another modern development is the practise of marketing at a younger age. This has been stimulated by increased costs of production and a greater public demand for lamb in place of mutton. Today the sheep industry is made up of these three divisions: the growing of sheep for wool; lamb production; and the fattening of lambs.

The financing of sheep operations differs only in detail from the financing of cattle. Sheep as security for loans are not regarded with the same favor, because the loss from weather and the depredations of wild animals is likely to be greater. There are, however, two favorable factors in the case of sheep: their early maturity and marketability and the income from the spring wool clip. Sheep credits come as a rule from commercial banks, wool warehouse companies and the livestock loan companies, some of which make a specialty of sheep loans. The usual credit is from two thirds to three fourths of the value of the flock. Up to 1923 credit facilities were adapted to the needs of the feeder or finisher rather than to those of the grower. But with the passage of the Agricultural Credits

Act, establishing Federal Intermediate Credit Banks and authorizing the formation of privately financed national agricultural credit corporations, the financial requirements of the rancher and livestock man began to be served more adequately.

Since the World War there have been two periods of heavy sheep marketing during the year: the months of May and June, when the native lambs weaned fat from their mothers are shipped; and the months of August, September and October, when the range lambs appear. This is a clear break with earlier practise. Before 1900 the meat packing industry was not organized to handle fresh mutton and lamb in the summer, nor was there a considerable consumer demand for these products. But the seasonal cycle of sheep marketing has been greatly modified by refrigeration. Of the total receipts of sheep in the United States approximately 75 percent are marketed at the public stockyards of the country; the concentration of slaughter is at four of these markets: Chicago, Kansas City, Omaha and Jersey City.

Hogs. Hogs constitute one of the most important sources of meat for human consumption and figure prominently in a proper agricultural economy. The hog is a highly efficient feeding machine: it is a user of foods unfit for man; it requires less grain per pound of meat than any other animal; and most of its carcass can be prepared as cured meat. It also helps maintain the fertility of the soil and is responsible for better farming practise because of the necessity for seasonal rotation of leguminous or nitrogenous pasture crops. The raising of hogs is easily within reach of every farmer because of their rapid multiplication and early maturity and because of the small capital investment required for their production. The amount of corn marketed in the United States in the form of hogs is in the neighborhood of 40 percent.

The world population of hogs is approximately 260,000,000. The leading producers are: China (average 1909-13), 76,819,000; United States (1930), 53,238,000; Germany (1930), 19,944,000; Brazil (average 1921-25), 16,169,000; Asiatic and European Russia (1930), 13,200,000. There are three types of agriculture in which hog raising plays an outstanding part. The first of these is corn growing, particularly when the crop becomes more important as a hog feed than a grain for human consumption. Hogs are therefore to be found in great numbers in the world's three great corn belts—central United States,

the La Plata region of South America and the Danube basin of southeastern Europe—where there has been developed a special type of hog which will convert the grain into pork and lard in the cheapest way possible. This is the so-called lard hog, a class which includes most American swine. The second type of agriculture involving hog raising is associated with the dairy industry, where hogs are grown extensively in order to utilize such by-products as skim milk, buttermilk and whey. The use for feed of these by-products in conjunction with small grains is common in the west north central states of the United States and in Canada, Ireland, Denmark, Holland, Sweden and Latvia; the type of swine produced on such a diet is the so-called lean, or bacon, hog. Potato growing, the third of these main types of agriculture, is predominant in Germany and Poland. In countries other than those mentioned in this paragraph the raising of hogs for commercial purposes is unimportant, although considerable numbers may be fattened for home slaughter on refuse from the kitchen garden and field. The hog production of the American cotton belt states, of the countries of southern Europe and of China is of this nature. Hog raising is insignificant in north Africa and southwestern Asia, because Moslem religious practise bars the use of swine for food.

The early Spanish explorers brought hogs to the gulf coast of the United States and the English settlers introduced them into the New England colonies and Virginia. Following the War of Independence the settlement of the Ohio valley led to the establishment of pork packing centers at the river towns, the chief of which, Cincinnati, became familiarly known as "Porkopolis." Artificial refrigeration was unknown and the packing season was limited to the winter months, when fresh pork was made available for city consumption. The continuance of the westward movement was responsible for the rise of Chicago as the leading hog market in the middle west; not long afterward markets sprang up along the Missouri River to take care of the hog supply from the farms in the western plain country. The advent of refrigeration in the 1870's released pork production from its seasonal dependence and insured to the consumer a constant supply of fresh meat and to the producer a ready market at all times of the year. The so-called razor backed hog, tall and long bodied with a long head and long ears, familiar to the America of the early nineteenth century, was a far different animal from the improved

type of lard hog of modern times, which has been produced by a process of crossing pure bred boars with mongrel sows.

Since 1900 hog production in the United States has remained centralized in the corn belt. Because hogs are used so largely to convert corn into pork, the hog profit on the production side depends upon the existence of a proper relation between the prices of the two commodities. This has been called the corn-hog price ratio and for a number of years 11.67 bushels of Number 2 corn were equal in value to 100 pounds of hog on the Chicago market. This relation between hog and corn prices has produced the so-called hog cycle, of four or five years' duration, during which production has gone through a regular round of expansion and contraction. As Larmer (*Financing the Livestock Industry*, p. 39-40) has described it: "Breeding at any given time is determined by the profit made from hogs during the preceding year . . . about one and a half years after hog prices touch their peak in relationship to corn prices, hog breeding reaches a maximum. This produces a surplus of hogs a year or more later. . . . Breeding, however, does not reach a low point until some time after the hog-corn price ratio has begun to rise again. . . . The relatively short swing of the whole cycle is due to the fact that the volume of hog production can be accelerated very rapidly. . . . Contrasted with cattle, hogs are bred young and reproduce before they are one year old. This is made possible by a gestation period of only 110 days. Moreover . . . hogs produce litters averaging six to eight pigs, and through careful feeding a sow may produce successfully two litters of pigs each year."

Two other factors, both of which are peculiar to the industry, influence hog prices: the existence of a large export surplus and the fact that a considerable portion of the annual product goes into storage. Changes in foreign markets are naturally bound to affect domestic hog prices. Again, because only 60 percent of the hog crop is marketed in the six months following every November, cold storage is necessary for the remainder. The meat packer is therefore called upon to act as the risk carrier while he takes care of the storage function from a time of plenty to one of deficiency.

Fully 80 percent of the hogs marketed in the United States pass through the public stockyards, the largest of which are located in the corn belt. The five principal hog markets are at Chicago, East St. Louis, Omaha, Kansas City

and Indianapolis. The United States Department of Agriculture lists the following as being the most important present day methods of marketing hogs: (1) producer shipments, including shipments to central markets, direct sale to packers and slaughter and sale of products by farmers; (2) local sale to the country drover or buyer, to the packer buyer and to the local butcher; (3) cooperative marketing through shipping associations and through auction sales.

More than half the hogs marketed in the United States are sold by the producer in the country, the rural buyer being the most important single marketing agency at work here. His strength has been based on his ability and willingness to buy small lots, to pay cash and to assume the entire risk. The recent appearance of the cooperative shipping association, however, has begun to cut seriously into the country buyers' activities, because these groups are also willing to buy small lots and at a lower cost. Because of these apparent advantages of cooperative shipping the cooperative marketing of hogs is increasing.

The prospects for the livestock industry throughout the world are bound up with the future of the food supply. There are many factors to be considered, a large number of which cannot be estimated statistically. It is certain, however, as R. J. McFall points out (*The World's Meat*), that the livestock industry will expand and consolidate on the basis of increased efficiency, which is necessary not only in production but also in the marketing process. Those who state that meat is seriously decreasing in importance as a food have overlooked the fact that there has been increased consumption in Europe during the past century in spite of the fact that meat was growing more costly than grains. It is unlikely that sheep production will continue to be confined solely to the pioneer fringe. Hog production may be expanded in certain areas of South America, Africa and southeastern Europe, while with the increase in dairying there will probably be an expansion of hog raising as a subsidiary industry. The production of beef will in all likelihood become more closely linked with general farming and with dairying. Much land which is today fit only for pasturage can be made more profitable and used for breeding herds. In the most highly cultivated areas it is likely that the less efficient types of livestock will give way to the more efficient. More intensive animal husbandry may require more labor per unit. The future of the

livestock industry is dependent not so much upon some changing fashion in human diet as upon a process of readjustment to the economic changes which are rapidly forcing all human activities to a new and lower price level. The rewards of the future will go to the most scientifically operated food industry.

RUDOLF A. CLEMEN

See: FOOD SUPPLY; STOCK BREEDING; CATTLE LOANS; CROP AND LIVESTOCK REPORTING; MEAT PACKING AND SLAUGHTERING; DAIRY INDUSTRY; WOOL; AGRICULTURE; GRAINS; DOMESTICATION.

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LIVINGSTON, EDWARD (1764-1836), American jurist, diplomat and statesman. After successful practise at the bar and three terms in Congress, in 1801 Livingston was appointed mayor of New York and federal district attorney. He reformed the rules of procedure of the mayor's court and published in 1803 a volume of opinions delivered therein. Livingston removed to New Orleans in 1804. His fame as a jurist rests largely upon his elaborate penal code, which foreshadowed nearly every reform in penology in the last half century. Sir Henry Maine called him "the first legal genius of modern times." After six years in the House of Representatives and two in the Senate Livingston became in 1831 secretary of state under Jackson. He wrote Jackson's nullification proclamation and conducted important negotiations concerning the Maine boundary and the young Latin American nations. From 1833 to 1835 he served as minister to France. Charged to secure payment of the American spoliation claims, Livingston found the French authorities intransigent but conducted the negotiations with dignity and ability until convinced that the effort was futile.

MILLEDGE L. BONHAM, JR.

Important works: *Judicial Opinions Delivered in the Mayor's Court of the City of New York* (New York 1803); *A System of Penal Law for the State of Louisiana* (Philadelphia 1833); *Complete Works on Criminal Jurisprudence*, 2 vols. (New York 1873).

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LIVINGSTON, ROBERT R. (1746-1813), American jurist, statesman and scientist. Livingston was one of the drafters of the Declaration of Independence and chairman of the committee which drafted the first constitution of New York. In France and America he fostered experiments in steam navigation, contributed largely to Fulton's success and invented a steam engine. He introduced merino sheep into America, studied breeding and popularized gypsum as a fertilizer. Chancellor of New York from 1777 to 1801, he organized his court, formulated its procedure and by his decisions and rulings laid the foundations for the equity jurisprudence of that state. First federal secretary for foreign affairs from 1781 to 1783, he organized the de-

partment well, conducted it skilfully and directed the peace negotiations, thus preparing the way for the federal Department of State. In the New York Convention of 1788 he secured the passage of a resolution that no vote should be taken upon any part of the federal constitution until the whole had been considered, thereby preventing its defeat by the concentration of the opposition upon the most unpopular features. As minister to France from 1801 to 1804 he was instructed by Jefferson to purchase New Orleans. He was offered the whole of Louisiana, and as a result of negotiations during the time he was awaiting the necessary powers he secured the territory for the price of 80,000,000 francs; when Monroe arrived with the necessary authority, the treaty was ready for signing.

MILLEDGE L. BONHAM, JR.

Important works: *Essay on Sheep* (New York 1809, 2nd ed. 1810); numerous letters and essays upon agriculture and industry in *Society for the Promotion of Useful Arts in the State of New York, Transactions*, vols. i-ii (Albany 1801-07).

Consult: Bonham, M. L., Jr., "Robert R. Livingston" in *American Secretaries of State and Their Diplomacy*, ed. by S. F. Bemis, vol. i (New York 1927) p. 113-89; Delafield, J. L., "Chancellor Robert R. Livingston" in *American Scenic and Historic Preservation Society, Annual Report*, no. xvi (Albany 1911) p. 311-30.

LIVINGSTONE, DAVID (1813-73), British missionary and explorer. Livingstone was sent out to Africa in 1840 by the London Missionary Society. When in 1851 he discovered that the Arab slave trade was spreading far into central Africa and blighting the prospects of missionary effort and all other civilizing work, he became convinced that this "open, running sore of the world" could be healed and the civilization of mid-Africa promoted only by Europeans present on the spot. Henceforward he persistently advocated a policy of commerce, colonization and Christianity. His historic journey across the continent (1854-56) and his Zambesi expedition (1858-64), which discovered Nyasaland, were undertaken with the purpose of finding a practicable route for colonists and traders into the interior. His search for the sources of the Nile (1866-73) was also prompted by the idea that geographic knowledge was a necessary prelude to commerce and colonization. He returned to Britain in 1856-57 and again in 1864. On both occasions his simple personality, his speeches and writings together with the fame of his exploits aroused public interest in the campaign against the slave trade and thus determined to

a considerable extent the character of the British attitude toward central and east Africa. Largely as a result of the deep impression he made on public opinion the British government was stimulated to secure in 1873 a treaty from the sultan of Zanzibar prohibiting all export of slaves and closing all public slave markets throughout the latter's dominions. The settlement of missionaries and traders in Nyasaland (1875-80) followed by the establishment there of a British protectorate was the direct outcome of his doctrine. The pursuit of the slave traders inland was one of the primary motives for the occupation and acquisition of British East Africa (Kenya and Uganda) which began in 1890. Only Cecil Rhodes has influenced British policy in Africa to as great an extent as Livingstone. It may be said that the best features of British administration from the Sudan to the Zambesi have been inspired largely by his idealistic attitude toward the African people.

R. COUPLAND

Works: Missionary Travels and Researches in South Africa, Including a Sketch of Sixteen Years' Residence in the Interior of Africa (London 1857, new ed. 1899); in collaboration with his brother Charles, with notes by F. S. Arnot, *Narrative of an Expedition to the Zambesi and Its Tributaries; and of the Discovery of the Lakes Shirwa and Nyassa, 1858-1864* (London 1865); *The Last Journals of David Livingstone in Central Africa, from 1865 to His Death . . .*, ed. by H. Waller, 2 vols. (London 1874).

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LIVY (Titus Livius) (59 B.C.-17 A.D.), Roman historian. Born at Padua Livy passed his life almost entirely at Rome, where, averse to a public career, he devoted himself to study. Although a moderate republican he was a friend of Augustus. Among his productions were philosophical and rhetorical works of popular character, now lost. His principal work, consisting of 142 books, is the history of Rome, *Ab urbe condita*, extending from the origins of the city (753 B.C. according to Varro) to the death of Drusus in 9 B.C. It was probably interrupted by the

author's death. Thirty-five books are now extant; the first ten go almost to the end of the Third Samnite War in 293 B.C. and the twenty-first to the forty-fifth extend from 218 B.C. to 167 B.C.; that is, from the beginning of the Second Punic War to the end of the Third Macedonian War. The remainder are known to us only as brief summaries.

Livy is famous among the ancients for his love of truth. The part of his history that has been preserved is not, however, that which best testifies to his worth as a historian. He never made direct use of documents nor did he always apply criticism to the written sources upon which he based his work. The Roman annalists whom he follows (as Valerius Antias and Licinius Macer) are in general among the later and less truthful. His Greek source, Polybius, however, whom he follows for the history of the struggle between Greeks and Romans, is of greatest value. He lacked concrete vision of the development of Roman power, topographical knowledge that would render his accounts of wars and battles comprehensible and a thorough knowledge of ancient Roman public law. His worth is in his style and in the clarity of his narrative, which make his work an epic of Roman glories, the more effective since they are combined with a stirring and almost fearful perception of the decadence of his time.

In antiquity Livy's fame was very great, even though his work was current chiefly in larger or smaller compendia; in the Middle Ages he was celebrated by Dante as "Livius who does not err"; in modern times there has taken place a strong reaction, beginning even before Niebuhr, against the authenticity of his statements. Although these have been necessarily submitted to severe criticism, his work will nevertheless always remain of great importance as a source of ancient Roman history and as suggestive testimony of the ancient grandeur of Rome.

GAETANO DE SANCTIS

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LLORENTE, JUAN ANTONIO (1756-1823), Spanish ecclesiastic and historian. Llorente had been ordained and had begun his career as a politician and lawyer in church and state, when, according to his own account, he abandoned ultramontanist and adopted the philosophy of reason. He entered the service of the Inquisition in 1785 and from 1789 to 1791 served as secretary of the Inquisition of Madrid. He was an adherent of several "enlightened" ministers of Charles IV and later supported Joseph Bonaparte. Llorente is an outstanding example of a tendency, widespread in eighteenth century Spanish historiography, to make much use of archive material largely in order to justify or condemn the many political and other changes of the times; he makes pretensions of extensive documentation, for example, in various works favoring restriction of papal and regional privileges. In 1809 he undertook under French patronage a study of the archives of the Inquisition, which was followed by a series of works culminating in the not very well ordered *Histoire critique de l'Inquisition d'Espagne* (4 vols., Paris 1817-18; Spanish ed., 10 vols., Madrid 1822; abridged English translation, 1 vol., 2nd ed. London 1827). In these studies Llorente charged that the Spanish Inquisition, established against popular will because of royal cupidity and papal ambition, frequently became an instrument of royal despotism; that, however, because of the secrecy of its procedure it often constituted an *imperium in imperio*; and, finally, that it was one of the principal causes of the intellectual and economic decline of the nation. These views were on the whole current both in Spain and abroad as a result of political and intellectual developments especially during the eighteenth century. Llorente's work gained its significance chiefly from its supposed authoritativeness in the descriptions of the inquisitional methods and the numerous persecutions and trials of great statesmen, scholars and churchmen, some of whom were later canonized; the total number of victims of the Inquisition, which he calculated by absurd methods, reached appall-

ing figures. Llorente's influence was apparent as early as 1812 in the report of the commission which recommended to the Cortes of Cadiz the abolition of the Holy Office. His studies served to substantiate the views of the liberal politicians, historians and sociologists of the nineteenth century as to the origin of the national ills, views which were widely held abroad also, and to perpetuate the dark representations of Spain which had originated in the international conflicts of an earlier era. Among a series of Catholic apologists seeking to refute Llorente was the great scholar Menéndez y Pelayo, who despised him as a traitor and irreligious hypocrite and accused him of bad faith. Although less partial students also have considered Llorente's work to be prejudiced and premature they have not agreed as to its relative trustworthiness. To some of them it has remained the beginning of serious documented study of the subject.

MAX LEVIN

Works: *Noticia biográfica de . . . J. A. Llorente, ó memorias para la historia de su vida, escritas por él mismo* (Paris 1818); *Noticias históricas de las tres provincias Vascongadas*, 5 vols. (Madrid 1806-08); *Memoria histórica sobre qual ha sido la opinión nacional de España acerca del tribunal de la Inquisición . . .* (Madrid 1812); *Memorias para la historia de la revolución española*, 3 vols. (Paris 1814-16); *Discursos sobre una constitución religiosa, considerada como parte de la civil nacional* (Paris 1819; rev. ed. Burdeos 1821).

Consult: Mahul, A., in *Revue encyclopédique*, vol. xviii (1823) 25-51; Menéndez y Pelayo, M., *Historia de los heterodoxos españoles*, 3 vols. (Madrid 1880-82, new ed. 1911-18); Schäfer, Ernst, *Beiträge zur Geschichte des spanischen Protestantismus und der Inquisition im sechzehnten Jahrhundert*, 3 vols. (Gütersloh 1902); Frédéricq, Paul, Introduction to the French edition of Lea, H. C., *A History of the Inquisition of the Middle Ages*, 3 vols. (New York 1888), tr. into French by S. Reinach (Paris 1900-02) vol. i, p. v-xxvii.

LLOYD, HENRY DEMAREST (1847-1903), American reformer. Lloyd was born in New York City, attended Columbia College and Columbia Law School and after three years' practise at the bar accepted a post on the *Chicago Tribune* in 1872. For more than a decade he served the *Tribune* on its literary, financial and editorial desks. In 1885, thanks to a competence that had been settled on his wife by her father, he was able to retire from active newspaper work and devote himself to public affairs. During the rest of his life he was the stalwart friend of all victims of economic oppression, defending, for example, the Chicago anarchists, supporting the Pullman strike, throwing in his lot with the Populist movement and championing trade

unionism, the eight-hour day and the fight on child labor. In a group of articles published between 1881 and 1884 Lloyd had already indicated his awareness of the transformation which was being effected in American economic life by the development of monopoly; this triumph of concentration he was to make the central theme of his chief work, *Wealth against Commonweal* (New York 1894), a carefully documented, realistic study of the methods by which the Standard Oil Company had succeeded in stifling competition. It was Lloyd's hope that such an analysis would arouse the American people to an appreciation of the growing peril of concentration and force the extension of government ownership to all fields "in which private sovereignty has become through monopoly a despotism over the public." While in 1898 he was ready to admit that his message had "penetrated only a short distance through the hippopotamus hide that protects the sensibilities of the people," he did not despair of the democratic processes, refusing to accept socialism's whole program because he was opposed to confiscation and the doctrine of the class struggle. Lloyd was eagerly interested in reform in Great Britain and Ireland, where he saw in "labor copartnership" (producers' cooperatives) and welfare capitalism the answers to the inequalities of private property; in New Zealand, where he found in the compulsory arbitration court the solution for industrial strife; in continental Europe, where advocates of agrarian credit systems and cooperative marketing agencies hoped to assure the permanence of a free small landholder class; in Switzerland, where the establishment of the initiative and referendum, government railroad and a state alcohol monopoly already more than hinted at the spirit and the forms of the democratic commonwealths of the future. Lloyd put accounts of these hopeful journeys into a series of books: these were to be the signposts for intelligent Americans in search of the "new conscience." Lloyd was both the first and the finest example of the muckrakers and reformers of the two decades from 1890 to 1910.

LOUIS M. HACKER

Works: *A Strike of Millionaires against Miners, or, The Story of Spring Valley* (Chicago 1890); *Labor Copartnership: Notes of a Visit to Cooperative Workshops, Factories and Farms in Great Britain and Ireland* (New York 1898); *A Country without Strikes: a Visit to the Compulsory Arbitration Court of New Zealand* (New York 1900); *Newest England: Notes of a Democratic Traveller in New Zealand* (New York 1900); *A Sovereign People, a Study of Swiss Democracy*, edited by

J. A. Hobson (New York 1907). Some of Lloyd's articles, addresses and lectures were published posthumously in *Man, the Social Creator* (New York 1906), *Men, the Workers* (New York 1909), *Massini and Other Essays* (New York 1910), and *Lords of Industry* (New York 1910).

Consult: Lloyd, Caro, *Henry Demarest Lloyd, 1847-1903: a Biography*, 2 vols. (New York 1912).

LLOYD, WILLIAM FORSTER (1795-1852), English economist and minister of religion. Lloyd was educated at Westminster School and elected to a studentship at Christ Church, Oxford University, in 1812. He became successively reader in Greek and lecturer in mathematics at Christ Church and in 1832 succeeded Whately as Drummond professor of political economy. In 1834 he was made a fellow of the Royal Society. After having held his chair for five years, as was customary at that time he retired to a living.

Lloyd's most notable contribution to economics is contained in his *Lecture on the Notion of Value, as Distinguishable Not Only from Utility but Also from Value in Exchange* delivered in 1833. This lecture gives, so far as is known, the first application of marginal analysis to explain the relation between utility and value in exchange. Although he does not use the terminology of later marginal theory he clearly distinguishes between total utility and marginal utility and shows that value is proportional to the pressure of want for the last increment of a commodity. The central idea is expounded with great lucidity and abundantly illustrated by example and analogy. His remaining eleven lectures, which he published in compliance with the statute governing his professorship, deal with the population problem and the poor laws. While accepting Malthus' main position with regard to the pressure of population on the means of subsistence, he none the less found good reasons for advocating a generous system of poor laws and was entirely opposed to the spirit of the Poor Law Amendment Act of 1834 and to the wave of opinion which that act represented.

Lloyd's style is scholarly and luminous; his reasoning clear and cogent. Although he never employs mathematical symbols, his economic analysis reveals his mathematical training. He was evidently a humane man, keenly alive to the sufferings of his age.

R. F. HARROD

Important works: *Prices of Corn in Oxford in the Beginning of the Fourteenth Century: Also from the Year 1583 to the Present Time* (Oxford 1830); *Lectures on*

Population, Value, Poor-laws and Rent (London 1837). The "Lecture on . . . Value" is reprinted in *Economic History (a Supplement to the Economic Journal)*, vol. i (1926-29) 168-83.

Consult: Seligman, E. R. A., *Essays in Economics* (New York 1925) ch. iii.

LOANS, INTERGOVERNMENTAL. Intergovernmental loans represent a form of financial assistance rendered by one government to another, usually in consideration of some actual or anticipated advantage to the lending country. This advantage may be direct, as in the case of financial assistance rendered to an ally in pursuit of a common war, or indirect, as when the granting of loans is aimed at preventing the financial and economic collapse of a state, whether because that state is an ally whose strength must be upheld or because its geographical, political and economic situation is such that its collapse might undermine the stability of neighboring states, the lending state included. More recently the use of intergovernmental loans has been suggested as a means of preventing violent aggression by a strong upon a weaker nation.

There are several types of intergovernmental financial assistance: the direct loan of money by one government to another, in which the creditor state procures the funds to be handed over to the borrowing state and bears the full risk in case of the latter's insolvency; the loan contracted by a group of states jointly and severally responsible—an extremely rare practise in intergovernmental finance; and government loans floated in a foreign market with the guaranty of the foreign government. This guaranty may be moral or legal: if moral, the guarantor's responsibility generally does not extend beyond the obligation to use pressure upon the borrowing state to assure the regular fulfilment of the terms of the loan; if legal, the guarantor state assumes the legal obligation to pay in case the borrowing state defaults. The guaranty frequently carries with it provisions for assigning specific sources of revenue for the payment of the loan and seldom imposes any real burden upon the guarantor state. Still another type of intergovernmental financial assistance is the subsidy; that is, the outright payment of a sum of money by one government to another without stipulation as to payment of interest or repayment of principal. This form of financial assistance has serious drawbacks. The government offering a subsidy is soon likely to meet with determined opposition on the part of taxpayers; and, on the other hand, the receiving of funds without obligation

to repay is conducive to wasteful expenditure on the part of the subsidized state. The subsidy is practically unknown today. All forms of financial assistance which involve the creation of indebtedness require the authorization of the legislative organs of the countries concerned.

Direct intergovernmental loans occur in times both of war and of peace. In the latter case, which is relatively rare, they are usually contracted for definite economic ends. Instances of direct loans in peace time are the loan of 20,000,000 gold crowns advanced by the Swiss government to Austria in 1923 to be used in the work of financial reconstruction, and the numerous short term advances made after the World War by certain European powers to Austria, Hungary and other central and southeastern European states as temporary assistance until more satisfactory long term loans could be arranged. The repayment of these loans offers no difficult problem; they are small in amount and since they are applied to an economic purpose they usually strengthen the financial position of the debtor state and enable it to discharge its obligations. They involve, however, the danger of the possible political subordination of the debtor to the creditor state. Under the pretext of assuring the repayment of the loans there may be established—not only over the finances of the borrowing state but even over its political activity—an organization of control which may eventually lead to a disguised protectorate. In order that such consequences may be avoided there have been devised international loans, advanced or guaranteed by several states; in this way any one state is prevented from acquiring and exercising a preponderant influence over the debtor state and the loan operations are given the character of real financial assistance, furnished in the interest of the borrowing state and of the community of nations.

Direct intergovernmental loans are of far greater importance in times of war. They usually occur among allied governments and constitute the quickest method of placing funds at the disposal of the borrowing government, which is thus released from the necessity of making large remittances abroad at a time when its financial resources are strained and its means of international payments seriously reduced or non-existent. Since such a loan is made at a definite rate of interest and its repayment is usually taken for granted for the time being, public opinion in the creditor country is likely to be favorably disposed toward the transaction. The funds are ordinarily employed in paying for purchases of

war materials and food supplies in the lending country, and economic activity is accordingly stimulated. Furthermore as the money lent by the government remains in the country, the problem of transfer—the most serious problem in international payments—is avoided, at least at the outset of the transaction.

The first major instances of direct intergovernmental loans in times of war were those advanced by the French government to the United States during the War of Independence. The amount of the several loans contracted between the years 1777 and 1783 was spent almost entirely in France in payment for supplies. The debts were completely repaid in 1795, in part by means of direct payment to the French government and in part through the transfer of funds to its account in the United States; these it used in payment of its American obligations. The following are instances of direct loans in the nineteenth century: the loan of £600,000 by Great Britain to Portugal in 1809, to be repaid in annual instalments at the rate of £57,170; and the loan of £2,000,000 by Great Britain to Sardinia in 1855, to be used in equipping an army of 15,000 men to serve against Russia in the Crimean War. Portugal paid its annuities until relieved from further payments by the Treaty of Vienna in 1815. Sardinia's repayments were at an annual rate of £80,000; by 1869 it had repaid £1,100,000 and still owed £1,662,547 on the principal.

Intergovernmental loans found their widest application during the World War. This period offers the most remarkable instances of direct loans in war time, not only because of the size of the sums and the range of the countries involved but also because of the political and economic difficulties besetting the liquidation of the loans. The series of war loans was initiated by Russia, which in October, 1914, applied to Great Britain for financial assistance. In 1915 France, Great Britain and Russia established the principle of pooling their financial and military resources. In the same year France sent gold to England on demand of the Bank of England in order to enable the British government to pay for purchases made in common for the account of the Allies. Some months later France demanded in turn the opening of credit for 1,500,000,000 francs. The gold sent to England was to be returned after the war, after the repayment of the credits advanced to France. The French government remitted to the British government non-negotiable short term Treasury drafts, renewable and re-

payable not later than one year after the conclusion of peace, which were to bear interest at the same rate as that paid by the British government on its loans. France and England extended loans to Belgium, Russia, Serbia, Italy, Rumania, Greece and other countries. With the financial exhaustion of France, Great Britain alone continued to make loans. Beginning in 1917, when it entered the war, the government of the United States became the principal creditor of the Allied countries. It loaned at first only to England, which in turn distributed among the Allies the funds thus obtained. Later the United States loaned directly to the various associates. After the Armistice the United States continued to make direct loans, which were used in payment for the purchase of American war supplies left in Europe, in financing the shipment of food to starving European countries and in the task of general economic and financial rehabilitation of Europe. The war loans as well as the post-Armistice loans were acknowledged by the remission of Treasury bonds bearing the signature of the borrowing state and carried stipulations as to interest and date of repayment. The accompanying table gives the structure of the interallied debts.

When the loans were undertaken little or no attention was paid to the economic difficulties involved in making large international payments. The borrowing governments expected that common victory would make the settlement easy: the conquered would pay the expenses of the war. During the negotiations of the peace treaties nothing was stipulated regarding the settlement of intergovernmental loans. After some years, however, the United States raised the question of repayment. In 1922 the foreign debt funding bill passed by Congress reaffirmed the principle of unconditional payment of interest and principal and provided for the refunding of the Allied debts by the issue of securities with maturity of twenty-five years, bearing an interest rate of not less than 4½ percent, the rate paid by the United States government on its domestic war loans. This act called into being the funding debt commission, which initiated a series of funding agreements between the United States and the European debtor countries. While all agreements specify the repayment of the principal, they deviate from the original provision of the funding debt bill with respect to the period of repayment and rate of interest; repayment is distributed over sixty-two years, while the interest rate, in all agreements lower than the

NOMINAL POSITION OF INTERALLIED AND RELIEF DEBTS AT THE END OF 1924
(In millions of dollars at the rate of exchange of Dec. 31, 1924)

DEBTOR GOVERNMENTS	TOTAL DEBT	TO WHOM OWED				
		UNITED STATES	GREAT BRITAIN	CANADA	FRANCE	ITALY
Great Britain	4554	4554	—	—	—	—
British Empire other than Great Britain and Canada	622	—	622	—	—	—
France	6911	4138	2767*	6	—	—
Italy	4755	2097	2639*	—	19	—
Belgium	579	472	43	6	58	—
Russia	3872	252	3267*	—	353	—
Poland	254	179	23	—	49	3
Czechoslovakia	155	116	2	—	29	8
Portugal	104	—	104	—	—	—
Jugoslavia	308	64	149	—	94	1
Rumania	268	45	134	20	62	7
Austria	113	30	51	—	18	14
Greece	154	17	99	8	30	—
Estonia	18	17	1	—	—	—
Armenia	20	15	5	—	—	—
Belgian Congo	17	—	17	—	—	—
Finland	9	9	—	—	—	—
Lithuania	6	6	—	—	—	—
Latvia	6	6	—	—	—	—
Hungary	2	2	—	—	—	—
Grand total	22,727	12,019	9,923	40	712	33

* Net.

Source: National Industrial Conference Board, *The Inter-ally Debts and the United States* (New York 1925) p. 25.

original $4\frac{1}{2}$ percent, varies in the different agreements in accordance with a hypothetical "capacity to pay" of the respective countries. Thus the agreement with Great Britain specifies 3 percent for the first ten years and $3\frac{1}{2}$ for the remainder of the period. In the Belgian agreement the pre-Armistice debt bears no interest, the post-Armistice debt is charged with a small but gradually increasing rate of interest, reaching $3\frac{1}{2}$ percent in the eleventh year and remaining at that level thereafter. In the agreements with Italy and France the debts carry no interest for the first five years; the interest rate rises from $\frac{1}{2}$ percent to 2 percent in the case of Italy and from 1 percent to $3\frac{1}{2}$ percent in the case of France. The agreements with minor debtors follow in general the lines of settlement laid down in the agreement between Great Britain and the United States. Great Britain at first favored general cancellation of all war debts. Confronted, however, with the policy of the United States, it concluded funding agreements with its debtors, having previously laid down the principle that under no circumstances would it collect more from its debtors than the amount of the payments which it would be called upon to make to the United States. France too concluded funded agreements with its debtors.

The repayment of intergovernmental loans of

such magnitude, however, gives rise to a series of political, economic and financial difficulties. Even assuming a formal willingness of the debtor governments to live up to the terms of the agreements, public opinion in the debtor countries generally contests the very principle of the loans, claiming that their proceeds were spent in the common interests of the debtor and creditor countries. In the case of the interallied debts the moral claim is strengthened by the fact that the European debtor states made greater physical sacrifices than the principal creditor, the United States, which made only a late entrance into the war. Even though these claims have no legal validity they have great moral force. Moreover the long period of amortization made necessary by the huge sums involved places the burden of repayment upon new generations, which will increasingly resent the payment of annuities.

Still more serious are the economic and financial difficulties of repayment. The raising of the annuities adds to the fiscal burden of the impoverished debtor countries. Furthermore the funds raised by the debtor governments are in national currency and must be converted into foreign exchange acceptable to the creditor nation. The only way to obtain international means of payment is by selling merchandise and services abroad; but in doing so the debtor countries

are confronted with the opposition of all the other countries, the creditor country included, for no state will permit its markets to be invaded by the exports of the debtor states. There is little doubt that the attempts to collect the war debts aggravated the general policy of excessive protectionism characteristic of the post-war period and contributed largely to the general economic crisis which set in in 1929. The serious fall in prices after that year further added to the burden of indebtedness, both because of the disastrous effect of the falling price level on international trade, the main source of international payments, and because of the general appreciation of the monetary unit in terms of purchasing power.

An additional source of difficulty is the link between the Interallied debts and the reparation payments (*see* REPARATIONS). Although the United States officially refuses to recognize any connection between these two categories of indebtedness—a position which is undoubtedly correct from the strictly legal point of view—it is nevertheless increasingly evident that the connection is vital. It is not likely that the European countries will continue to pay the United States unless they receive the payments due to them from Germany, and it is still less likely that Germany will ever resume payments on account of reparations. Although in 1932 the United States is still adhering officially to the principle of payment of debts, a revision of the debt problem appears inevitable. The Hoover moratorium of 1932 suspending the payment of intergovernmental debts is an expression of the impasse which has been reached in the attempt to collect the war loans.

Of wider application than direct loans are government loans floated in a foreign country with the guaranty or recommendation of that country. Debts so contracted are called commercial as distinguished from direct intergovernmental war loans, which are referred to as political debts. Governments appear more disposed to repay the former than the latter. The suspension of a political debt or the refusal to pay it does not jeopardize the credit of a state; it is always easy to find pretexts to justify the non-payment or to insist upon a reduction or cancellation. On the other hand, in the case of commercial debts contracted with individuals or private banking institutions suspension of payment or demand for total or partial cancellation signifies state bankruptcy with all its disastrous consequences to the credit standing of the country. It is largely because of this circumstance

that governments desirous of lending financial assistance to foreign governments prefer the form of a loan advanced by private financiers backed by governmental guaranty. The intervention of the government may manifest itself in the form of moral pressure on the financial community to finance the loan or may be confined to a mere authorization of the loan issue. Whatever the form adopted, the state is not the direct lender; the debt is consequently commercial and is more difficult to repudiate than a political debt.

This form of financial assistance is used only rarely in times of war. In 1795 Great Britain guaranteed the payment of interest on a loan amounting to £4,600,000 floated on the London market by the emperor of Germany, who in turn undertook to employ at least 200,000 Austrian soldiers in the war against France. The payments were made for three years, after which England was obliged to assume the services of the debt. In 1797 a new agreement was concluded for the guaranty of a loan of 1,620,000 francs in order to reimburse the English government for its advances. Austria did not pay the interest and the English Exchequer carried the full amount. The debt was finally liquidated in 1823. Another instance of governmental guaranty of a loan floated by another government is offered by the Turkish loan of 1855. In order to stimulate a more vigorous prosecution of the Crimean War on the part of Turkey, France and Great Britain jointly guaranteed a loan of £5,000,000 to that country, issued in London and secured by specific Turkish sources of revenue. In case of default Great Britain was to assure the payment of interest and principal with a recourse against France. Turkey was to reimburse both countries. The obligations of the loan were regularly discharged until 1875, when they were first reduced and then suspended. From 1876 the British government assured the payment of the obligations and in 1879 France was called upon by England to furnish its contribution. The financial liquidation of Turkey in 1880 led to the organization of international financial control, under which Turkey was able to pay the obligations of the loan until the World War.

Loans guaranteed by governments are more frequent in times of peace. The guaranty is given either in order to aid a state in financial distress, usually at the close of an unsuccessful war, or in order to manifest an assumed protectorate over it. One of the earliest instances of such loans was that to Greece in 1833, when that country was

financially exhausted by the War of Independence. In order to stabilize the new kingdom and furnish it with financial resources France, Great Britain and Russia guaranteed a loan of 60,000,000 francs. It was issued in three sections, British, French and Russian, each power guaranteeing a third of the services of the loan. The payments by Greece were irregular until they were definitely secured in 1859 by the appropriation of specific government receipts. The same powers also guaranteed the Greek loan of 1898, when the country was ruined by the disastrous war with Thessaly. The loan amounted to 170,000,000 francs, and the payment of the services was secured by the appropriation of receipts under strict international control. This guaranty, which was extended to all subsequent Greek loans as provided by the act of control, was not resorted to. In 1932, however, the suspension of payments on the external debt by Greece raised the question of guaranty. A similar guaranty was extended to Egypt in 1885: a loan of £9,000,000 was guaranteed by France, Germany, Austria-Hungary, Great Britain, Italy and Russia; the obligations were regularly discharged under international control and the guaranty was never invoked. The Austrian loan of 1923 amounting to 585,000,000 gold crowns was guaranteed by France, England, Italy, Czechoslovakia, Belgium, Sweden, Denmark and the Netherlands, each nation guaranteeing only a fraction of the loan. Each guarantor state remitted bonds to the Swiss National Bank in recognition of its responsibility. These bonds are payable on demand in case of default on the part of Austria. The repayment of the loan was secured by appropriation of substantial sources of revenue under the control of the League of Nations. The Czechoslovakian loan of 1932 was guaranteed by France.

An instance of the guaranty of a loan accorded by a state as a manifestation of a protectorate assumed by the guarantor government is offered by the Tunisian loan of 1884 guaranteed by France. After the establishment of its protectorate over Tunis in 1881 France wished to suppress foreign interference in Tunisian finance. As a result of arrangements with Great Britain and Italy it repaid the Tunisian debt, which was supervised by international commission, and to this end caused the Tunisian government to issue a loan of 17,550,000 francs, for which France gave personal guaranty. Under the protectorate of France the financial administration was improved; the guaranty was not invoked.

The device of a moral guaranty of foreign loans is of growing importance. Although relatively rare prior to the establishment of the League of Nations, an early instance may be found in the moral guaranty accorded by Great Britain and France to the loan of £120,000 floated by Uruguay on the London market in 1846. Neither France nor Great Britain assumed any legal financial responsibility toward the creditors and there was no organization of foreign control over the administration of the loan. Other instances of a moral guaranty include the loans to Santo Domingo in 1907 and Nicaragua and Honduras in 1911, which the United States guaranteed morally by assuming the control over the receipts which were assigned for the payment of services. The practise found considerable extension in the period of financial rehabilitation after the World War. The economic and financial disorganization of numerous European countries, with its attendant menace of economic and social upheavals, induced the stronger states to come to their aid with loans which were accorded the moral guaranty of the League of Nations. Such are the loans to Austria in 1923, to Hungary in 1924, to Greece in 1924-27, to Bulgaria in 1926 and 1928, to Danzig in 1925 and 1927 and to Estonia in 1927. In 1926 Armenia solicited the intervention and moral guaranty of the League but did not obtain it, since the Soviet Union could not offer any effective security. In obtaining such guaranty a definite procedure has been evolved. After having previously negotiated with the principal nations belonging to the League the state in distress solicits the intervention of that body. The Council of the League instructs its Committee of Finance to institute an inquiry and to draw up a plan of aid; this is prepared in collaboration with the government seeking the loan and is then submitted to the Council. If it is approved, the protocol is drawn up and presented to the petitioning government for approval. The protocol contains the recommendation of the League that the bankers finance the loan, and it is in this recommendation that the moral guaranty lies. The guaranty has practical value. The protocol always stipulates the appropriation of ample receipts to be used in discharging the obligation arising out of the loan, the appointment of foreign commissions to protect the rights of the creditors and the organization of a more or less strict control over the public finances of the borrowing state by a delegate of the League. In case of difficulties between the delegated com-

missioner and the debtor state the decision is left to the Council of the League.

A further extension of the principle of guaranty in intergovernmental finance is contemplated in the project of an international convention adopted by the Assembly of the League in 1930. This provides that in certain cases and under specified conditions the Council of the League may decide to accord financial assistance to a state which is a victim of or threatened by aggression, if it thinks that peace can be assured in no other way. The financial assistance of the signatories to the convention will assume the form of a legal guaranty of a loan contracted by the state in need. Member states were asked to become parties to the convention beginning in January, 1932. The convention cannot come into force until a minimum of three signatories will have pledged a sum of at least 50,000,000 gold francs for the annual service on the loans to be guaranteed, and it will be concluded for a period extending to the end of the year 1945. The convention will remain in force for successive periods of five years, with the power of revocation two years before the expiration of the current period.

GASTON JÉZE

See: INTERNATIONAL FINANCE; FOREIGN INVESTMENT; WAR FINANCE; MONETARY STABILIZATION; PUBLIC DEBT; FOREIGN EXCHANGE; MORATORIUM; REPARATIONS; INTERNATIONAL RELATIONS; IMPERIALISM; INTERNATIONAL ADVISERS; INTERVENTION.

Consult: Jéze, Gaston, *Cours de science des finances et de législation financière française*, 2 vols. (6th ed. Paris 1925) vol. ii; Friedrich, Johannes, *Das internationale Schuldenproblem* (Leipsic 1928); National Industrial Conference Board, *The Inter-Ally Debts and the United States* (New York 1925); *The Stroke of the Moment, a Discussion of the Foreign Debts*, ed. by Oswald Chew (Philadelphia 1927); Gerould, J. T., and Turnbull, Laura S., *Interallied Debts and Revision of the Debt Settlements (a Compilation of Articles and Documents)* (New York 1928); Moulton, H. G., and Pasvolosky, Leo, *World War Debt Settlements* (New York 1926); Saint-Germès, J., *La Société des Nations et les emprunts internationaux* (Paris 1931); Feis, Herbert, *Europe, the World's Banker 1870-1914* (New Haven 1930); Lucien, Petit, *Histoire des finances extérieures de France pendant la guerre* (Paris 1929). For an extensive bibliography on interallied debts and reparations, see Sveistrup, Hans, *Die Schuldenlast des Weltkrieges* (Berlin 1929).

LOANS, PERSONAL. The term personal loans is used here to denote loans for personal rather than business uses, for consumption rather than production purposes. It is often difficult, especially in an agricultural society, to distinguish between the two types of loans: the difference

between loans to a farmer who has consumed his seed as food and now needs money to buy new seed and to a farmer who has made allowance for seed but needs food is a narrow one. In urban life too it is often difficult to classify a small loan made to a small merchant or artisan; even pawn-broking loans may serve as the basis for a small business venture. From a historical point of view the differentiation of loans for personal consumption from those for business purposes became possible only when the merchant began to maintain special accounts for the management of his business undertakings and when the firm became clearly distinguished from the private household.

Personal loans as here understood are sometimes used, as in the case of instalment sales (really loans with the purchased article as security) and loans for the purchase of commodities which might otherwise be bought on the instalment plan, to provide for additional purchases of a type which are not absolutely necessary but possess varying degrees of desirability. The rationale and institutional arrangements for such loans are discussed elsewhere (see *INSTALMENT SELLING*). Sometimes personal loans are contracted to cover the conventional needs of a social class accustomed to elaborate expenditures, such as formerly were involved in the court service required of the knights; in modern times the extravagance of the *jeunesse dorée* offers an analogy. In the great majority of cases, however, personal loans represent an attempt to cover deficiencies in the supply of necessities occasioned generally by some emergency which has made unexpected demands upon the resources of the borrower. Illness, death, accident or loss of some kind may tax normal income excessively. Normal and even reduced expenditures may require supplementation where normal income is inadequate or has been temporarily reduced by illness, accident or unemployment. Where loans are sought for the purpose of covering non-recurring expenditures or temporary deficiency in income, subsequent normal income may be sufficient to wipe out the debt. But where the latter is too heavy or where the normal income never reaches the normal expenditure, the loan may become an agency for peonage and enslavement.

Originally personal loans without any special recompense for the lender may have prevailed. The members of a clan, a town, a religious society, were expected to help their fellows with their surplus means. This aid among friends and

relatives appears in a more advanced society in the Biblical injunction requiring that the wealthy loan to the poor without charging interest. Although assuming the form of a loan, the aid is thought of as a charitable deed. He who is blessed with possessions gives of his abundance. No business deal is intended in this connection, nor is there any question of interest: the giving is done *gratis et amore*; as expressed in the Sermon on the Mount in *St. Luke* (vi: 35) *nihil inde sperantes*.

This ideal of altruistic communal help gave way rather early, however, to the demand on the part of the lender for compensation for the time during which he was deprived of the use of that which he had loaned. Thus among the Melanesians a young man who borrowed from the chief for the purpose of purchasing a bride had to return eleven strings of cowrie shells for every ten borrowed. Révillout states that the loan at interest was developed in Mesopotamia, whereas Egypt retained the interest free loan down to the time of Bocchoris.

The development of an agricultural economy produced a different economic basis for loans, while increasing their extent and social significance. These loans were made occasionally by the temples but ordinarily by the large land-owners, who demanded and received both interest and security. Even at the time of Hammurabi Babylonian peasants were deeply in debt to the large proprietors because of loans of seed grain or cattle. In Greece Hesiod records the heavy burden of indebtedness to the large proprietors and the same phenomenon is found in Rome. Loans may be productive in an agricultural economy in the sense that seed or cattle borrowed or purchased with borrowed funds may produce enough to permit payment of some interest. But borrowers in such an economy are generally unable to repay the loan, especially if a high interest is charged. Reduced to want by illness or crop failure, while they may be enabled by a good crop to repay the interest and part of the principal they can rarely repay both interest and principal with enough to spare to sustain them until the next harvest and to provide seed for the following year; they are thus often reduced to a position of semipermanent indebtedness which becomes permanent in case of a crop failure. Because of the uncertain character of agricultural return the Babylonian law released the debtor from the payment of interest in a year of crop failure, but not when his failure to raise a crop was due to mere negligence. War with its

burden of military service and its devastation of the fields increased the hazard of these loans. The destruction of the Attic peasantry by the Decelean War and of the Roman by the Punic wars resembled the consequences of the wars of the seventeenth and eighteenth centuries in eastern Europe. Like the consumption loan, then, the agricultural loan becomes a basis for extortion and oppression. It was against such abuses that the prophets of the Old Testament and the Greek philosophers raised their voices and the Roman legislators tried to limit at least the rate of interest. The church in the Middle Ages forbade the lending of money at interest among Christians.

The lender was usually content to keep the debtor in a state of dependence through high interest charges. He could, however, utilize his power to dispossess the debtor of his homestead. Isaiah cries out against those "that join house to house, that lay field to field" (v: 8). Foreclosure and the sale of the debtor into slavery, which were permitted in many ancient societies, were generally not premeditated. Fundamentally every loan is based upon the creditor's expectation that the debtor will be able and willing to repay—that is, upon the honesty and ability of the debtor.

This reliance on the character of the debtor, however, was early supplemented by many forms which are still used to prove the existence of the debt, to enforce payment or for both purposes. The most effective proof was a written record, particularly a note signed by the debtor. In the absence of such records the creditor might invoke witnesses to support his claim in court. One of the earliest forms of security, which was at once proof and guaranty, was the pledge. The Bible, while permitting the use of this device, provided that a poor man's pledge must not be kept overnight (*Exodus* XXII: 26; *Deuteronomy* XXIV: 12-13). Loans on pledges at interest seem to have been employed by the Melanesians even before the coming of the whites. Where no pledge was used, the creditor might demand the guaranty of a third person, who would become responsible for the debt should the debtor fail to pay. The precarious position of the guarantor is frequently commented upon in the Apocrypha, while Cheilon of Sparta said "If you go security, you are in misfortune." The surety device forms one of the corner stones of the modern system of small loans (*q.v.*).

In the collectivist feudal society consumption loans to individual serfs played a minor role.

The position of the serf was more or less static and was bound up, through the strip system of agriculture, with that of the entire manorial group. The peasant's share in the land was practically inalienable and the responsibility of his maintenance in times of emergency was accepted by the lord of the manor. In the towns the guilds provided mutual insurance against certain exigencies. Even in the Middle Ages, however, townspeople were forced for one reason or another to appeal to the money lender, as is evident from the importance possessed by pawn-broking at that time.

The important consumption borrowers during the Middle Ages were the kings, the ecclesiastical lords and the feudal nobility. Certain of the loans made to these borrowers were related to emergencies, such as foreign wars; knights who participated in the crusades, for example, were forced to borrow for the purpose of arming and maintaining a fighting force for a long period of time far from their native land. Often, however, they were merely to cover, in anticipation of revenues from the feudal or sovereign realm, certain more or less regular expenditures or payments. Important among the latter were the papal dues levied upon the various ecclesiastical lords; a well developed system of loans was organized in Rome, apparently with papal approval, to permit the lords to make their payment to the Curia before they had collected the dues for their districts. Attendance at court entailed heavy expenditures, while the luxurious tastes contracted by many of the crusaders through their contact with eastern civilization resulted in a higher standard of living and a continued need for funds.

While the town of antiquity was the seat of landowners who engaged also in lending out money, the mediaeval city was a city of merchants. The merchant supplied the requirements of the feudal aristocracy. In the course of transactions on credit the merchant very often made his noble customers dependent upon him, so that finally land and rights fell into the hands of the lender.

Spendthrift and ambitious monarchs alike found themselves in constant need of additional funds. Loans to needy sovereigns were frequently made by prominent mediaeval merchants, such as the Bardi and Peruzzi of Florence, who lent money to the kings of France and England during the fourteenth century; the Fuggers, who did the same for the Hapsburgs; the Medici, who furnished the financial basis for the

power of the popes. Since these loans were based in last analysis upon the lender's good standing with his sovereign, they involved considerable risk. A pope, such as Sixtus IV, hostile to the Medici might turn the administration of the Curia over to others, leaving the Medici in a very difficult position. The Bardi and Peruzzi suffered heavily from the bankruptcy of Edward III in 1345 and the Fuggers from the national bankruptcies of the sixteenth and seventeenth centuries.

When the national state replaced the absolute ruler personal loans for the consumption needs of the sovereign gave way to other forms. The continuity of the state, with the consequent possibility of standing loans, was first established in the mediaeval cities; this idea was transferred to larger territories and to national states through the constitutional monarchy. But the idea of the state as a borrower for consumption purposes, which was dominant in the public finance before the emergence of the national state, still exists in such expenditures as those for war and armaments (*see EXPENDITURES, PUBLIC*).

During the seventeenth and eighteenth centuries the lords, who borrowed heavily to finance the high expenditures imposed upon them by attendance at court and by the necessity of providing annual levies, were forced either to introduce more efficient methods of management on their estates or to surrender them to their creditors, who farmed them more efficiently. Thus the increased consumption needs of the landed nobility indirectly contributed to the technological improvements which characterized agriculture in this period.

During the greater part of the Middle Ages the foreign merchant and money lender had dominated the business of providing personal loans. The person in need, disliking to reveal his plight to his neighbor, frequently turned to the foreigner, even though the latter imposed harder conditions upon him. Among the foreigners may be included the Jews, who although they had no home other than their place of residence, were generally considered foreigners because they had no community with the parochial church. They were exempt from the general canonical prohibition against usury. The Jews were generally admitted to a particular city only on sufferance, for a limited period of time and on condition of the payment of an annual due. From time to time they had to pay extraordinarily burdensome tributes; they were expelled from England and France in the thirteenth cen-

tury and from the German imperial free towns in the fourteenth century.

During the thirteenth century the dominance of the Jews was challenged by that of the Lombards, who generally came as fiscal agents of the pope for certain purposes and engaged in money lending on their own account. They were generally subject to the same legal restrictions as the Jews, and contemporary literature indicates that they were economically more exacting than the latter and were equally condemned by the people of the time. Since they were under the protection of the pope the Lombards did not suffer, as did the Jews, during the crusades; although the poor complained of their high interest charges, the rich found it advantageous to invest their surplus funds with these pawnbrokers. Another important foreign group of money lenders were the Caorsini, or Kawerschen, so-called after the city of Cahors in Provence. Schulte has shown that the name Caorsini was a generic term for usurers in the thirteenth century and that the Caorsini who settled in southern Germany as pawnbrokers, money changers, tax farmers and minters were actually exiles from the city of Asti. The Sienese who went to England as tax collectors for the pope were also called Caorsini. Loans at interest were also made by religious institutions, by the nobility (who, particularly in the vicinity of Cologne, loaned to other nobles) and by wealthy native burghers. In many territories the Jews were readmitted because they charged a lower rate of interest than that ordinarily charged by other money lenders. They enjoyed a very considerable influence during the eighteenth century in the eastern monarchies of the European continent, especially under the dynasties of the Hohenzollerns and the Hapsburgs.

The promissory note in connection with loans was greatly developed in the Middle Ages. Notes were often so drawn as to nullify all objections, including those of the canon law, and to effect a speedy payment. Knights departing for the crusades signed bills in Genoa and Venice which obliged the guardians of their castles to repay the Italian merchants at one of the next fairs in Champagne. In the south notes were usually drawn up before a notary public, while in northern Europe they were recorded in the town records in the presence of the town magistrate. The pawned pledge also continued of such importance that it was customary to invest part of one's property in goods which could easily be pawned, such as table silver and jewels. Insignia

of power were also pawned. The English crown was pawned with Italians and with Hanseatic bankers. Pope Martin was forced to threaten Cosimo de' Medici with excommunication in order to regain the miter pawned by Pope John XXIII.

The interest rates on personal loans were very high during the Middle Ages, the customary rate being about 43 percent per annum. In order to ease this tremendous burden on the needy various attempts were made to found under religious or charitable auspices institutions which might loan funds at lower rates. One of the earliest of these was the attempt to establish pawnshops, controlled either by a religious order or by some governmental agency, which would loan funds on pledges at much lower rates of interest (see PAWNBROKING). Unsuccessful attempts to establish institutions such as those which later came to be called *montes pietatis* were made at Freising in Bavaria in 1198, at Salins in Franche-Comté in 1350 and in London in 1361. The first successful *mons pietatis* was established by the Franciscans in Perugia in 1462; it was followed the next year by one in Orvieto, and others sprang up rapidly throughout Italy. Loans were made at the rates, low at the time, of 4 to 12 percent, which covered administrative expenses and paid a small interest charge on the capital invested. Protests by the Dominicans against any charge for the loan precipitated a religious conflict which was not quelled until 1515, when the Lateran Council approved the Franciscans' institutions and method of functioning. The *montes pietatis* spread chiefly throughout Italy, Belgium, Germany and France. In 1777 there was set up in Paris by the French government a *mont-de-piété* which has been maintained continuously ever since; municipal pawnshops are also operated by many French cities, while pawnshops which are operated by various governmental agencies are common on the continent where they function either as monopolies or in competition with private pawnbrokers.

In addition to these public and charitable pawnshops various other agencies to provide personal loans have been developed. Although credit cooperatives are generally for production loans, some of them provide only personal loans; others furnish both types. In addition various special facilities for small loans have grown up, particularly in the twentieth century, to provide small personal as well as business loans and have integrated these types of loans more definitely

in the credit structure of the modern economic system.

HEINRICH SIEVEKING

See: FINANCIAL ORGANIZATION; SMALL LOANS; INSTALLMENT SELLING; CREDIT COOPERATION; PAWN-BROKING; USURY; PLEDGE; DEBT; CREDIT.

Consult: Cunow, H., *Allgemeine Wirtschaftsgeschichte*, 4 vols. (Berlin 1926-31) vol. i; Révillout, E., *Précis du droit égyptien*, 2 vols. (Paris 1903); Beer, Max, *Allgemeine Geschichte des Sozialismus und der sozialen Kämpfe* (6th ed. Berlin 1929), pt. i tr. by H. J. Stenning as *Social Struggles in Antiquity* (London 1922) ch. i; Davidsohn, R., *Geschichte von Florenz*, 4 vols. (Berlin 1896-1927) vol. iv, pt. ii; Hoffmann, Moses, *Der Geldhandel der deutschen Juden während des Mittelalters bis zum Jahre 1350*, Staats- und sozialwissenschaftliche Forschungen, vol. xxxii (Leipsc 1910); Schulte, A., *Geschichte des mittelalterlichen Handels und Verkehrs zwischen Westdeutschland und Italien*, 2 vols. (Leipsc 1900); Beardwood, Alice, "Alien Merchants and the English Crown in the Later Fourteenth Century" in *Economic History Review*, vol. ii (1929-30) 229-60; Patetta, F., "Caorsini Senesi in Inghilterra, nel sec. XIII con documenti inediti" in *Bolletino senese*, vol. iv (1897) 311-44; Sieveking, H., *Entstehung und Entwicklungstendenzen des Kapitalismus* (Hamburg 1928); Ehrenburg, Richard, *Das Zeitalter der Fugger*, 2 vols. (Jena 1896), tr. in part by H. M. Lucas as *Capital and Finance in the Age of the Renaissance* (London 1928); Kuske, B., "Die Entstehung der Kreditwirtschaft und des Kapitalverkehrs" in *Die Kredit-Wirtschaft*, 2 vols. (Leipsc 1927) vol. i, p. 1-79; Holzapfel, H., *Die Anfänge der Montes Pietatis 1463-1515* (Munich 1903); Degani, L., *I monti di pietà*, Biblioteca di Ragioneria Applicata, vol. vi, nos. 12-13 (Turin 1916); Cuneus, H., *Die öffentlichen Leihhäuser Deutschlands unter besonderer Berücksichtigung der grossen Institute* (Leipsc 1931); Seligman, E. R. A., *The Economics of Instalment Selling*, 2 vols. (New York 1927); Honegger, H., *Der schöpferische Kredit* (Jena 1929); Robinson, Louis N., and Stearns, M. E., *Ten Thousand Small Loans* (New York 1930).

LOBBY. The lobby has yet to live down its past. So frequently has it been associated with the efforts of the unscrupulous to secure legislation for their selfish ends that an unfavorable connotation has persisted. The lobby has usually been brought to public attention because of its derelictions and has been represented on such unfortunate occasions by the least savory of its practitioners. Privilege seekers, it can be safely assumed, are always to be found about legislative bodies. A scandal merely serves to remind the public of their presence. Efforts to direct the process of lawmaking by pressure from selfish outside interests were made in the First Congress. In March, 1790, William Maclay wrote in his journal concerning the struggle to pass the bill funding the national debt: "I do not know

that pecuniary influence has actually been used, but I am certain that every kind of management has been practised and every tool at work that could be thought of."

An outstanding early case was that of Manassah Cutler, who secured aid for his land promotion scheme in 1786 by sharing profits with influential members of Congress. Professional persuaders in the past have exerted all their wiles to secure favorable action for the interests that employed them. Gaming resorts, such as Pendleton's "Palace of Fortune," are said to have been their places of rendezvous. Sam Ward was one of these adventurers who won recognition as a legislative fixer.

The term lobbying was not applied generally until after the middle of the last century. It was the scandals of the 1870's that challenged public attention. The investigation into the Pacific Mail Steamship subsidy lobby revealed great sums expended for bribing government officials and legislators. Cakes Ames as agent of the Crédit Mobilier unabashedly sought to exchange railroad shares for legislative support. The demand for the enactment of measures to curb the lobby came to nothing. A feeling grew that many congressmen failed to consider the national welfare. The lobbyist was regarded as the agent of big business seeking to corrupt the representatives of the people. Beliefs of this sort added to the strength of the Greenbackers, Populists and other reformist groups. The railroads and large corporations were suspected of improper dealings with legislative bodies; nor were all of these suspicions without foundation. The New York investigation of 1905 reported upon the efforts of insurance companies "to procure or prevent the passage of laws affecting not only insurance but a great variety of important interests to which through subsidiary companies or through the connections of their officers they have become related." It was found that enormous sums had been expended in a surreptitious manner. In varying degree the situation which was disclosed in New York held true for a number of other states as well.

The quickened interest in political and social problems coming in the decade after 1905 had its effect upon the lobby. The farmer, the laborer and the reformer decided that it was to their advantage to maintain permanent offices at the capital. Special interest representatives openly undertook systematic campaigns to influence the course of legislation. Muckraking, "trust busting" and reforms in governmental structure

stimulated people toward a direct exercise of their power in politics. The direct election of senators worked some change in the distribution of political influence, and the overthrow of "Cannonism" disrupted the domination of the House by a few men.

The investigation of the lobby prompted by President Wilson in 1913 demonstrated that a change had occurred in the methods of influencing legislation. The old secretive means of persuasion proved their ineptness under changed conditions. Those seeking favorable action made demands on the government in the name of the voters they claimed to represent. The World War served to stimulate the organization of such groups. Trade associations grew in size and number, trade unions increased their membership, and individuals in many walks of life through recourse to the various associations that stood for particular interests found their relations with the government simplified. The expansion of governmental services and regulatory agencies has increased and complicated the points of contact between citizen and official. It has made the government a potential factor of aid or of interference in a multitude of day to day operations. Some special interest spokesmen come to the capital seeking profit; others are afraid not to come.

Virtually every interest of any national importance has its spokesmen in the capital, and the state legislative bodies find themselves confronted with similar agencies. Current problems bring appropriate propaganda agencies into existence; fundamental social and economic interests are represented by permanent and substantial organizations. In the case of the latter lobbying is but one phase of their activities, while with the former persistent agitating is their only justification for existence. The attainment of their goal means desuetude unless another cause is soon found. Moreover there are some societies that exist merely to lobby and to solicit support for their organizers from the gullible on the strength of unprovable boasts of success in influencing legislation. Congressional investigations have time and again exposed such quacks, scoundrels and frauds.

The many able and honest lobbyists carry on their work year after year unnoticed and unknown to the general public. They are recruited largely from the law, from journalism and from the government service. Former legislators have sometimes become conspicuous lobbyists. Not a few are technical experts or scientists; some are

business men and some professional promoters or reformers. These men regard themselves as the representatives of the voters who compose the membership of their respective leagues and associations. These organizations usually hold annual conventions, where policies are discussed and a program is agreed upon for the coming year. Frequently a legislative committee is charged with the task of lobbying for those measures which the convention designates. Most lobbyists claim that they are simply carrying out such instructions.

In an estimate of the power of a lobby the cohesion of the membership is of as much importance as its numerical strength. In the final analysis it is the lobby's control of votes that constitutes its means of forceful persuasion. It can evoke the threat of appealing to the congressman's constituents against his position. A well organized minority of determined voters working together for definite purposes constitutes an element that cannot be ignored in any campaign. Few legislators refuse to compromise in such a situation. The lobbyist by closely following the course of legislation and watching the votes upon questions of concern to his organization keeps his supporters informed. Usually they are simply urged to write to their representatives requesting favorable action, although sometimes the lobby participates in election campaigns. It is easy, however, to overestimate the effect of such activities. The lobbyist is largely concerned with supplying information to congressmen and appearing at committee hearings. As expert witness and as spokesman for special interests he aids in the consideration of technical legislation and moreover assists in the enactment of acceptable laws.

Whether in seeking to influence legislation by campaigning for candidates who will not oppose his policies or in persuading those already in office to take a sympathetic attitude the lobbyist is careful to preserve a strictly non-partisan position. He has certain definite aims to achieve and he finds little to gain through identification with one or another party. In fact party discipline would create a conflicting loyalty. The lobbies most strongly entrenched are able to command the votes of blocs in the legislature without regard to party affiliation. All the important lobbies can depend upon the support of a few congressmen or senators. These men sponsor the measures framed by the lobbyists, introduce their propaganda into the *Congressional Record* under the privilege to extend remarks and then

permit its distribution by congressional franking. They attempt to secure prompt action on the lobbies' bills, reading the speeches and using the arguments supplied them by these interests. A bloc of faithful supporters in the legislature is the strongest weapon the lobby can have. Many congressmen are members of one or more organizations that have occasion to seek legislative favors. The American Legion, for example, can depend upon the aid of the legionnaires in Congress for most of its measures. The Legion lobbyists work in closest cooperation with them, drafting bills, securing hearings, presenting evidence, rallying aid from the home districts and seeking press support.

It is the realization of the power of propaganda that has made present lobbying methods what they are. Abuses are not so crude as in the early days. Bribery no longer plays a part, but backing can be bought through the more subtle means of supplying favorable publicity or assistance in campaigns. The public utilities corporations, for example, in attempting to build up a favorable public attitude directed their propaganda not only to public officials and the press but likewise to the schools and to research institutions. In varying degree other economic interests and reform leagues strive to foster public support for their cause and then use this favorable opinion in appealing to legislators. They insist that they represent great forces within the community: some do, while others must first create the opinion they later reflect.

The evils to which the present lobby gives rise are deception and coercion. The forces of a group opinion can be vastly exaggerated by skillful manipulation and used to threaten a public official. Cowardice is a common political weakness and one that permits lobbyists often to be taken at their own evaluation. Most of the legislation for the regulation of lobbying simply demands of the lobbyist that he appear in his true colors. Measures regulating the lobby have been advocated since the 1870's; a bill "to prevent professional lobbying" was introduced in the Fifty-third Congress; several further efforts were made in later congresses, the Sixty-third Congress being especially active in investigating and attempting to pass regulatory legislation. Five bills were introduced in the session of 1927 and four in 1929-30. Extensive inquiries into lobbying activities were made by Congress in 1913 and in 1930. Although there is as yet no federal law on the statute books, thirty-two states have enacted some form of regulatory legislation. In

Georgia the constitution of 1877 declares lobbying to be a crime. Massachusetts in 1890 and Wisconsin in 1899 were the first states to pass laws requiring the registration of lobbyists. Many of the other states have adopted this same principle in their laws. The lobbyist must give his name and that of his employer and indicate the legislation with which he has been concerned. His employer must file a statement of expenses. Publicity was thought sufficient to provide the necessary protection. The proposed federal laws adopted the same safeguard.

The laws thus far enacted have not been entirely successful. Registration in itself does not challenge public scrutiny, and inadequate provisions for enforcement render such lists well nigh meaningless. In fact the existing laws in many cases are not strictly observed and serve little purpose. In framing a law it is difficult to define lobbying in terms that will check the deceitful and dishonest and still not restrict the citizen's right of petition. An effective law must require more than registration yet should not hamper those who wish to make known their views to legislators. Laws cannot be made in isolation from those who will be affected by the law. Successful lobbying can be conducted through the mails; propagandists need never meet their subjects face to face; yet communication with congressmen could scarcely be supervised. Wealthy groups may create a semblance of popular support by artificial means, and even a relatively poor but well organized group may develop sufficient synthetic opinion to give the appearance of a widespread public interest. Can such activities be curbed without affecting the right to free association for common purposes? A system for disclosing the name and connection of all those lobbying together with a full report as to their expenditures might prove useful if strictly enforced and widely publicized. The term lobbyist would have to be carefully defined and narrowed in its application. Some check upon the accuracy of the reports made would be necessary.

It is futile to attempt to legislate the lobby out of existence. The lobby has become part of the American system of representation. It provides a means whereby a form of functional representation is made to supplement the geographical system. With the political parties failing to take a definite stand upon controversial issues agencies concerned with the promotion of a particular issue or definite interests become necessary. Lobbying organizations exist because thousands

of citizens give them support. This is evidence of a feeling that some matters are of so much concern to the welfare of the individual that the formal system of political representation is not adequate. The citizen apparently believes that certain affairs vital to him may fail to receive the consideration they deserve. He is willing to undertake the trouble and expense of supporting a lobby in the belief that it will better protect his interests and perhaps secure favorable legislation.

While the informal and inadequately regulated lobbying in the United States fills a need it leaves much to be desired. Misrepresentation and lack of balance are inevitable. Propagandists and self-seeking promoters may exercise an influence far in excess of their relative social significance. The cry of special interests tends to drown the plea of the general interest. The public has no lobby. In many European countries economic councils have been instituted to bring together in an orderly array representatives from the various economic classes of the nation. The creation of a board composed of economic experts who would call upon national associations for advice in national planning is now being considered for the United States. While it is doubtful that lobbying would be absorbed in the activities of such a body, the according of a degree of official recognition might introduce some order into the existing informal and disorderly system of functional representation. The unimportant and "fake" organizations might thus be eliminated and the lunatic fringe of reformers clipped.

As a whole, however, the present day lobby cannot be dismissed as an abnormal appendage to the legislative body. It has become a political institution. Whether its potentialities result in good or evil depends not only upon the lobbyists themselves but upon the public and the government.

E. PENDLETON HERRING

See: PUBLIC OPINION; INTERESTS; REPRESENTATION; LEGISLATIVE ASSEMBLIES; PARTIES, POLITICAL; BLOC, PARLIAMENTARY; FARM BLOC, UNITED STATES; MACHINE, POLITICAL; CORRUPTION, POLITICAL; BRIBERY; TRADE ASSOCIATIONS; ANTI-SALOON LEAGUE; CIVIC ORGANIZATIONS; FUNCTIONAL REPRESENTATION; NATIONAL ECONOMIC COUNCILS.

Consult: Logan, E. B., "Lobbying" in American Academy of Political and Social Science, *Annals*, vol. cxliv, supplement (1929); Herring, E. P., *Group Representation before Congress*, Institute for Government Research, Studies in Administration, vol. xxii (Baltimore 1929).

LOCAL FINANCE comprises the fiscal activities of the primary as well as the intermediate units of local government. The scope and problems of local finance depend therefore primarily on the position of local government within the general governmental system of the country. The size of the local units, the scope of functions entrusted to the local bodies and the extent of central control over local activities all affect the structure of local finance. Diverse systems of local government have produced a corresponding variety of local fiscal organization. The term local finance is also used to designate that part of fiscal science which deals with the principles underlying the financial organization of local government.

The distribution of administrative functions between the central government and local authorities has been influenced not only by political but also by financial considerations. The central government has usually reserved for itself those functions which it considers indispensable to the safety and stability of the state. On the other hand, governmental functions which clearly redound to the benefit of the local population have been assigned to local authorities. Still other functions have been entrusted to special local bodies, such as school districts, park districts and public utility organizations (in Germany, *Zweckverbände*), which were organized for the purpose of supplying specific local services. Parallel to the functional distribution of expenditure between the central and local powers there has also evolved a gradual distribution of revenue between the two spheres of government. This division may assume various forms: specific sources of revenue are assigned to the respective authorities; or one sphere of government, usually the local, is permitted to add supplementary rates to the existing state taxes; or a centrally administered tax is shared with localities or a locally administered tax with the central authorities; or, finally, the arrangement may involve a complete concentration of tax revenue in the hands of one, usually the central, authority, which in turn undertakes to finance the local activities in the form of subventions and grants-in-aid.

Neither on the expenditure side nor on the revenue side is it possible, however, to draw a clear line of demarcation between the two spheres of activities, and the fiscal interrelationships vary from country to country and in point of time within the same country. In Great Britain and the United States the local bodies may

exercise only the specific powers bestowed upon them by the Parliament and state legislatures respectively. In continental countries, on the other hand, the prevailing practise is to distinguish between necessary, or mandatory, and permissible, or optional, expenditure. The first group originally included items of expenditure in which the local population had very little interest; for instance, the supply of housing facilities for the army. Later a more liberal attitude prevailed. The mandatory expenditures, prescribed in general terms by the central authority, ordinarily include expenditure on education, elections, some phases of the administration of justice and to an increasing extent measures of social welfare, such as poor relief, labor exchanges, unemployment relief, child welfare and juvenile courts. The enforcement of the mandatory provisions is greatly facilitated by the extensive control of central authority over local authorities in European countries. The superior authority may refuse to approve the budget which contains omissions of mandatory expenditure or may even insert the mandatory expenditure into the local budget. Beyond the mandatory expenditures, however, the local bodies enjoy considerable freedom in widening the scope of expenditure, subject of course to general restrictions with regard to tax limits, limitation of indebtedness and similar regulations.

The increase of local expenditure in practically all countries is due in part to the widening range of purely local governmental activity and in part to the assignment to local authorities of certain governmental functions which, although

general in scope and significance, can best be performed by them. The rate of increase has been considerably accelerated since the World War, particularly in the fields of social welfare, education, poor relief, highway construction, housing and unemployment. Notwithstanding extensive grants-in-aid and subventions by the central authorities to localities to satisfy the increasing demands for revenue, the financial position of the local governments in almost all countries has become extremely strained in recent years. The significance of local expenditures becomes more obvious when it is realized that the chief item in national expenditure consists of payments for national defense and for service on public debts. With these sums deducted the percentage of local to total expenditure on regular public administration amounted in 1925-26 to 82 percent in Great Britain, 57 percent in France, 71 percent in Belgium and 54 percent in Italy.

Generally speaking, the development of local finance in modern times moves in the direction of centralization of revenues and decentralization of expenditures. The democratic demands for additional government services and post-war economic distress have created a heavy drain on public finance. The more the governments have been compelled to satisfy those demands, the more the authorities have had to resort to local administration. The increasing role of expenditures for social services may be seen from the following figures: In Great Britain the expenditure on social services (other than expenditure out of loans for capital purposes) reached in 1929 the amount of £403,950,000 as compared with £63,000,000 in 1910. Unemployment claimed £53,296,000; health insurance, £38,570,000; widows', orphans' and old age contributory pensions (for those between sixty-five and seventy years of age), £26,445,000; old age non-contributory pensions (for those over seventy years), £35,780,000; war pensions, £51,375,000; education, £100,510,000; reformatory and industrial schools, £690,000; hospitals, maternity and child welfare work, £11,418,000; housing of the working classes, £35,598,000; relief of the poor, £44,997,000; lunacy and mental deficiency service, £5,271,000. Of the total amount £94,164,000 was raised by local taxation, £184,018,000 by parliamentary votes and grants of the Treasury and the remainder by contributions, rents and the like. The administration of these services is chiefly done through the local authorities. In Germany of the total local expenditure amounting in 1928-29 to 8,241,900,000 marks

NATIONAL AND LOCAL EXPENDITURES IN SELECTED COUNTRIES

COUNTRY	YEAR	EXPENDITURES (IN 1,000,000)	
		NATION- AL	LOCAL
Great Britain	pounds 1925-26	668	414
France	francs 1925-26	38,971	10,510
Belgium	francs 1925-26	4,966	3,365
Italy	lire 1925-26	16,095	6,200
Germany	marks 1928-29	12,559*	8,242†
United States	dollars 1929	5,922‡	7,126
Japan	yen 1929-30	1,736	1,753

* Includes expenditures of the states, amounting to 4184 million marks.

† Includes expenditures of Hanseatic towns, amounting to 622 million marks.

‡ Includes expenditures of the states, amounting to 1990 million dollars.

Source: Figures for Great Britain, France, Belgium and Italy are taken from Germany, Statistisches Reichsamt, *Finanzen und Steuern im In- und Ausland* (Berlin 1930) p. 650; other figures cited from official sources of the respective countries.

(inclusive of 621,900,000 marks spent by the Hanseatic towns) care of the poor, minors, invalids, unemployed and insane claimed 2,186,600,000 marks and education 1,556,800,000 marks. Housing, scarcely known as an item of public expenditure before the war, required in 1928-29 an expenditure of 1,542,400,000 marks, of which 1,119,700,000 marks were spent by local bodies.

In the United States local expenditure has shown a continuous increase and in 1929 it reached the total of \$7,126,100,000. From 1923 to 1929 the proportion of local expenditure to the combined total of all public expenditure in the United States increased yearly. In 1929 education accounted for \$1,925,500,000, highway construction for \$1,169,900,000 of net local expenditures, the remainder being distributed among various items, such as cost of government administration, protection, various measures of economic development and social welfare.

The widening scope of local expenditure was not, however, accompanied by a corresponding movement in the field of local revenue. On the contrary, the trend in revenue collection in recent years is unmistakably in the direction of greater centralization in the hands of national or state authorities. Legislation in post-war Germany brought about strong centralization of revenue in the hands of the federal government. The local authorities are prevented from levying any tax which the federal government chooses to reserve for itself. The revenue system in Soviet Russia is almost completely centralized. Even in the United States, where decentralization of revenue has gone furthest and where originally the bulk of state revenue was derived from locally administered taxes, the tendency is unmistakably in the direction of state administered and locally shared taxes.

The necessity of centralizing revenue and of transferring a considerable part of the local tax burden to the central authority is dictated largely by the limitations inherent in local taxation within a national economy. As compared with the facilities of the national government the possibilities of raising revenue by local bodies are quite limited. All forms of indirect taxation are practically closed to local authorities. They are unable to levy customs duties, although they may collect the so-called *octrois*; that is, duties levied on goods entering town. In France and other countries *octrois* at one time yielded enormous returns and often constituted the chief source of municipal revenue. They have, how-

ever, been universally condemned as interfering with internal trade, and the cost of their collection is very high. France has therefore adopted a policy of gradual suppression of *octrois* and in 1918 abolished the local levies on beverages, compensating the communes by a special fund, *contributions indirectes*, created from national sources, the proceeds of which are distributed annually among the local communities. In 1930 in France 968 communes still collected *octrois*, with a total yield of 964,000,000 francs. In Belgium and Holland *octrois* were prohibited and replaced by direct grants of the national governments to local bodies. The new Italian tax code which became operative in 1932 abolished all *octrois*; by way of compensation the national government assumed the payment of salaries to school teachers and judicial officers, hitherto an item of local expenditure.

Local bodies are also virtually precluded from the possibility of collecting excise duties; in fact, local excise taxes are doomed to be defective, they are easily subjected to evasion and graft and may undermine a federal or state tax of the same character. Similarly a local sales tax is technically an anomaly. Local bodies, particularly municipalities, may exact an indirect tax by charging high prices for services supplied by municipal public utilities. Considering the danger of such indirect taxation, the tendency is to impose legislative limitations on the amount of profit allowed such enterprises.

Nor are all forms of direct taxation suitable sources of local revenue. The inheritance tax is clearly unsuitable: it would introduce abnormal variations in the revenue system of the locality and would lead to evasive practises, aggravated by the inevitable tangle of jurisdictional tax disputes and multiple taxation. All attempts to introduce a local inheritance tax in Great Britain have been rejected. The corporation tax and the income tax are equally unsatisfactory as local taxes; in both the base transgresses local boundaries. The difficulties which are involved in localizing the wealth of the corporation or the income of the taxpayer would render any such taxation largely inoperative or arbitrary. In pre-war Germany the states were forced to restrict the localities in their levying of income taxes. In Holland, where for generations a local income tax constituted the backbone of local revenue, yielding approximately three fourths of all municipal taxation, the government finally prohibited local income taxation in 1929 and established instead a centrally administered com-

munal fund which is redistributed among the local bodies according to population and other indices, such as assessed wealth and the average public expenditures on police, education and public assistance.

Local income taxation failed chiefly because of the difficulties involved in the apportioning of taxable income to different taxable areas and because of the resulting diversity of tax rates in different communities. Consequently the only possible solution left to local authorities is the levying of separate taxes in rem (*Realsteuern*, real taxes), either in the form of specific taxes on land, buildings, local business, securities and wages or partly in the form of a classified property tax. A special surcharge on local real property and business is perfectly justified, as they are usually the principal beneficiaries of the bulk of local expenditure; the value of real estate in a locality increases with high local "beneficial" expenditures on roads, sewers, water supply, lighting, health, fire and police protection and educational facilities. Where a certain expenditure clearly redounds to the benefit of a specific property, the device of a special assessment or betterment tax should be applied to cover the cost incurred. More often the beneficial character of the local expenditure is of a general nature and calls for a general tax on the benefited property. Where, however, the localities perform functions which are clearly of a national character, where the maintenance of a "national minimum" of efficiency, such as a certain standard of education and public health, seems indispensable to the welfare of the state, the national treasury should subsidize the localities in the performance of such functions.

The application of the principle of benefit in local taxation has been unduly attacked by some fiscal writers but is well established in fiscal legislation. Thus the Prussian *Kommunalabgabengesetz* of 1893, which was the most noteworthy pre-war legislative act concerning local taxation and is in the main still in force, stressed the necessity of basing local taxation on benefit and services rendered and consequently encouraged fees and special assessments. It assigned to the exclusive use of the localities taxes on land, on buildings and on business. Just before the World War the tax on the increment of land value (*Wertzuwachssteuer*) found wide application in German municipalities; it was later absorbed by an imperial tax of similar nature. In Great Britain the bulk of local taxation is derived from the rates levied on the

occupier of real property. In the United States the proportion of revenue from property taxation to total local tax revenue amounted in 1930 to fully 92 percent, ranging from 98.74 percent in Oregon to 75.76 percent in Alabama. In nearly three fourths of the states property tax revenue amounted to more than 90 percent of all local tax revenue. A number of states have even attempted a complete separation of sources by assigning to localities the exclusive use of the general property tax. It was hoped that this measure would remove the incentive for underassessment and would result in a generally fairer distribution of the burden of taxation. Although the application of this measure resulted in increasing local revenue in many instances it fell short of the general expectations which prompted its adoption. Moreover the rigid application of the principle carries with it the danger of rendering the tax system too inflexible. Local taxation in the United States could be much improved by the resolution of the general property tax into its constituent elements—that is, into a series of specific taxes on income yielding property—or by its transformation into a classified property tax with different rates for each type of property.

The financial disparity resulting from the widening scope of local expenditure and the limited base of local taxation accounts for the increasing importance of national contributions to local treasuries. In 1925-26 the proportion of local revenue derived from grants-in-aid, subventions and centrally administered but locally shared taxes amounted to 25 percent in Great Britain, 21 percent in Belgium, 13 percent in France and 11 percent in Italy. In Germany the localities were compensated for the rigid limitation upon their tax revenue by assignment of a portion of the centrally administered taxes. In Soviet Russia practically the whole local revenue is supplied from national revenue. In the United States the state grants to localities amounted in 1925 to an average of between 7 and 8 percent of total local revenue for all states, ranging from 0.8 percent in Kansas to over 27 percent in Wyoming. Also of growing importance is the share of revenue derived by localities from taxes administered by the state; in 1925 they yielded 4.1 percent, in 1928 5.6 percent of the total local tax revenue. In many states the shares granted to local bodies are by way of compensation for the withdrawal of certain classes of property from local taxation; in others, they constitute an outright grant in response to increasing financial needs of local governments. The shares are al-

lotted on various bases: tax revenue, assessed valuation of property, financial needs of the respective localities; the state subsidies and the shares of state taxes accruing to localities are frequently assigned to special functions, such as education, highway construction and others, which although originally of local nature have acquired an increasing general significance.

A system of national or state subsidies may also be used as an effective means of equalizing the distribution of expenditure and the tax burden between wealthy and poor districts. This is applied on a large scale in England. London has created special equalization funds from which a part of the local revenue obtained by taxation of the wealthier districts is redistributed among the poorer districts. France gives special subsidies to the poor provinces, and the German government has recently undertaken a thorough investigation of the taxing capacities of local districts with a view to a more effective distribution of local expenditure and revenue.

The increasing interest in local finance since the World War has produced important legislation, particularly in the field of the fiscal interrelationships between the central and local authorities. The British Local Government Act of 1929 represents a remarkable piece of legislation and is especially noteworthy for its solution of the problem of grants-in-aid and the relation of national and local finance. It devised a scheme of local taxation relief by providing that the national Treasury assume the whole burden of local taxation of agricultural property and three fourths of industrial and freight transport hereditaments (real property). For this reason the British national budget for 1932-33 has increased the total amount of grants to local bodies to £136,000,000, of which £46,000,000 is on account of local taxation relief, £51,000,000 in educational grants, £15,000,000 for housing and £11,000,000 in police grants. In France, where the *centimes additionnels*, or supplementary rates, imposed upon national direct taxes constituted one of the important sources of local revenue, the approach to a reform of local taxation is much more conservative. Its interesting feature is the possibility of extensive use of house rentals for tax purposes (a reformed progressive *contribution mobilière*). The law of 1926 granted to the local bodies the right to levy twenty-three different kinds of local taxes, of which the most important are taxes on net revenue of buildings and land, on house rentals and business offices, on servants and vehicles. But even a liberal applica-

tion of all of these taxes does not solve adequately the problem of balancing the local budgets. Of great interest are the Dutch law of 1929 and the numerous financial settlements (*Finanzausgleiche*) in Germany, Austria, Switzerland and other countries which are attempting to solve the problem of the relations between federal, state and local finance.

Recent development of local finance in European countries shows centralization not only of revenues but of local borrowing as well. In Great Britain the local loans policy is highly centralized and supervised. In France the contracting of a debt requires the approval of higher authorities, in some cases that of the president of the republic. Restrictions of similar nature exist in practically all European countries; some attempt not only supervision of local indebtedness but centralization of local borrowing as well. Thus in Germany the Deutscher Zentralgiro- und Sparkassenverband serves as the central credit agency of the local bodies. The Belgian central institution, the Crédit Communal, provides communes with loans on a cooperative basis. In Great Britain the Public Work Loan Board advances money to local authorities for public works, chiefly for sewage, water supply and housing. In France the law of 1931 called for central provision of local credit through the Caisse de Crédit aux Départements et aux Communes.

In the United States local indebtedness has increased rapidly in recent years; in 1928 it amounted to \$11,106,000 as compared with the states' indebtedness of only \$1,502,000,000. Local borrowing has been encouraged by the exemption of local government bonds from taxation and by the constitutional and legislative limitations on local taxation. Most of the loans have been floated for the purpose of highway and school building construction. Although the per capita indebtedness is not abnormally high, the fact that the proceeds of the loans are used largely in non-revenue producing expenditures greatly endangers the balancing of local budgets in the future. The recent practise of issuing tax anticipation warrants carries with it grave dangers to the financial solvency of local governments. Most state constitutions contain provisions restricting the total amount of local indebtedness, which is usually fixed in some relation to assessed valuation of property within the locality. Some states prescribe the purpose for which loans may be contracted; others limit the period of maturity; still others prescribe the submission of loan

projects to a popular referendum. Although limitation of indebtedness is a step in the proper direction, constitutional restrictions are found to be too rigid and expert opinion favors legislative or administrative regulation as the more flexible form of control.

The administrative aspects of local are similar to those of national finance. In most countries local authorities have adopted some form of budgetary procedure, in which they frequently follow roughly the practises regulating the formulation, organization and execution of the national budget. In the United States the local budget system is far from satisfactory. The complicated and overlapping system of local administration prevents proper budgeting. The extent of central control over the fiscal administration of the local governments varies considerably from country to country. In Germany, France and other European countries control is quite rigid and effective. Even in the United States, where local governments have enjoyed the widest freedom from state supervision, most states have in the last fifty years adopted measures of control of varying rigidity and effectiveness. Nearly every state has some form of audit of local finance, but only a few states have a really effective system of control. The tendency, however, is everywhere unmistakably in the direction of subjecting local administration to a more effective supervision by central authorities.

PAUL HAENSEL

See: PUBLIC FINANCE; MUNICIPAL FINANCE; EXPENDITURES, PUBLIC; REVENUES, PUBLIC; PUBLIC DEBT; ACCOUNTS, PUBLIC; BUDGET; FINANCIAL ADMINISTRATION; LOCAL GOVERNMENT; COUNTY GOVERNMENT, UNITED STATES; COUNTY COUNCILS; ADMINISTRATIVE AREAS; GENERAL PROPERTY TAX; HOUSE AND BUILDING TAXES; PROPERTY TAXES; LAND TAXATION; SINGLE TAX; SPECIAL ASSESSMENTS; GOVERNMENT OWNERSHIP; MONOPOLIES, PUBLIC; EDUCATION, section on EDUCATIONAL FINANCE; GRANTS-IN-AID.

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LOCAL GOVERNMENT. In general local government may be said to involve the conception of a territorial, non-sovereign community possessing the legal right and the necessary organization to regulate its own affairs. This in turn presupposes the existence of a local authority with power to act independently of external control as well as the participation of the local community in the administration of its own affairs. The extent to which these elements are present must in all cases be a question of degree. For there is inevitably an ultimate limit to the freedom of action of the local authority, as otherwise it would occupy the position of a sovereign state; while it is likewise obviously impossible for all the citizens to participate at all times in the acts of the local authority. It should also be borne in mind that insistence on modern electoral systems and decision by majority vote as the only valid criteria of local autonomy would exclude many significant phenomena, such as the Indian village, where decision goes by the general sense of the community.

The familiar distinction between states, such as France, in which the organs of local government were created by and are subordinate to the central government and those, such as England, where local government preceded the central power is of less importance than is generally supposed. For in the older European countries central and local institutions have usually interacted over a long period of time; and in the process both have been developed. Furthermore local autonomy has never been secure from infringement by the mere fact that the organs of local government preceded in point of time the rise of the central power; while, on the other hand, in some of the newer countries outside Europe local authorities enjoy remarkable freedom despite the recency of their creation.

In England the actual origins of local government are unknown. Township and hundred and shire go back to the days before King Alfred, at least five hundred years before the arrival of the central administration in the twelfth century. The county is a feudal or prefeudal unit, the parish an ecclesiastical unit of great age, the borough a product of the middle ages. The ancient boroughs managed from an early date to establish some kind of local council and obtained various rights, privileges, immunities and

franchises from the king or the local lord, generally acquired in exchange for money payments and usually embodied in a charter. In the counties, however, the only regular form of government until the end of the nineteenth century consisted of centrally appointed officers, such as the sheriff, the lord lieutenant and the justices of the peace. Practically all the county officers were subject to appointment by the crown, although since Tudor times justices have been selected from local men. Although organized primarily for judicial purposes these justices performed also a number of administrative and legislative functions and were always subject to the control of the King's Bench.

By the time of the popular reform movements of the nineteenth century the government of the towns, for long left virtually unsupervised by the central government, had in some places fallen into decay and in others was struggling with obsolete forms to satisfy the needs of growing industrial communities. Three years after the Reform Act of 1832 the first Municipal Corporations Act reconstituted the boroughs on new and uniform lines. The previous year had seen the reorganization of the poor law and the establishment of the elective boards of guardians who were henceforth to be responsible for its administration. During the next half century various ad hoc elective or appointive boards, such as highway, sanitary and education boards, were set up, each confined in its scope and purpose to a prescribed statutory function. In the last quarter of the century these boards were swept away and replaced by local councils possessing general powers. Thus in 1888, four years after the third Reform Act, the Local Government Act set up a county council in every administrative county; in 1894 a further statute initiated the urban district councils, rural district councils and parish councils. In 1929 the poor law authorities after a separate existence of three and a quarter centuries were merged in the general local authorities. In England more than in any other leading country local history and spontaneous local growth have determined the shapes and sizes of the various areas, but Parliament has formulated the type and structure and functions of the authorities which administer those areas.

The administration of Gaul under the Roman Empire permitted at first a considerable degree of municipal autonomy but this developed later into bureaucratic centralization. As a result of the weakening of the power of the central government of France under feudalism the towns

acquired new liberties and privileges by agreement with the feudal lords. When the royal power began to gain ascendancy over the great lords, the centralizing tendency started afresh; and from the fourteenth century the autonomy of the chartered towns was gradually extinguished. The culminating point was reached under Louis XIV and Richelieu, who placed intendants by the side of the old provincial governors to act as agents of the crown. In the *pays d'élection*, which constituted about two thirds of the country, the intendant was in complete control and all power, including that of taxation, was gradually drawn into his hands. In the towns and communes there was a confused mass of authorities, formerly elective but by the seventeenth century largely hereditary and purchasable.

The Constituent Assembly in 1789 abolished the intendants, swept away the old provinces and created eighty-six departments, each presided over by a prefect; the disorderly array of cities, boroughs, towns and villages was replaced by the universal commune—in accordance with the principle of equality, which was considered applicable to local authorities no less than to individuals—administered by an executive board not subject to control or dissolution by the central government. These boards came into frequent conflict with the central power and after numerous unsatisfactory experiments the centralized system was readopted under the Directory and Napoleon. By the side of the nominated deliberative authorities were placed executive officials—prefects, subprefects and mayors—also nominated by the emperor and responsible to him. In spite of various subsequent innovations, such as the introduction of popularly elected municipal councils, the French system of local government, even to the present day, may be regarded as the creation of Napoleon and more remotely of Richelieu. The influence of the French system has been immense although not continuous, not only in the smaller neighboring countries such as Belgium but in the larger states such as Italy, Japan and to some extent Germany.

The history of the German cities goes back to the time when the Roman camps and colonies on the rivers of Germany formed the nuclei of towns. During the later Middle Ages they attained a position of unrivaled freedom and power, and during the twelfth and thirteenth centuries their prestige and autonomous status entitled them to be regarded almost as city-states. From the thirteenth century until the rise of princely absolutism in the seventeenth powerful

leagues of towns were formed for political, economic and military purposes, such as the Swabian league in south Germany, the League of Rhenish towns and the famous Hanseatic League, which included about ninety ports and towns in Germany, Sweden and the Netherlands. The Thirty Years' War (1618-48) was disastrous to many of the German towns, and they were further weakened in their powers of self-government by the conflict which developed during the seventeenth and eighteenth centuries between the small oligarchical family groups into whose hands the city government had fallen and the vocational guilds whose growing strength led them to demand a share in municipal administration. The absolutism of this period was most pronounced in Prussia under the Hohenzollerns; the avowed policy of Frederick William I was to appoint mayors who were completely subservient to the royal will.

The Prussian Municipal Ordinance of 1808, embodying the liberal reform program of Baron vom Stein, abolished election by guilds and corporations and established a popular assembly to elect the town council, which was to "control the entire administration of the municipality in all its branches." The executive was to be elected and controlled by the council, although in the large cities the burgomaster was to be nominated by the crown from a list submitted by the council. Police functions were withheld from the local authorities, although they might be devolved by the state on the local executive. For the next fifty years the history of municipal government in Germany consisted in the working out of the Stein reforms in Prussia and their adaptation to the needs of other leading German states. Retarded by the conservative reaction following 1830 and advanced by the aggressive liberalism of 1848, the movement for responsible local autonomy eventuated in the comparatively reactionary code of 1853, which subordinated the council to the executive, reclaimed for the state government the control that it had given up half a century earlier and replaced the secret and equal franchise by a three-class system of voting based on incomes. But one very important concession to local autonomy was the power conferred on local authorities to do whatever they might consider necessary for the welfare of the city. In this way there arose the practise of granting to German cities general powers to carry out anything not contrary to the law of the land. At the same time the code provided that the sanction of the superior authorities would in most

cases be required. The enactment of the republican constitution at Weimar in 1919 did not alter essentially the relation of the states to the municipalities, although in certain fundamental respects, as, for example, with regard to finance, it strengthened the national government to the detriment of the states and the municipalities. Most of the separate states reorganized their systems of local government between 1919 and 1924.

Several of the divisions within each state in Germany, such as the province, the rural circle (*Landkreis*) or town circle (*Stadtkreis*) and the commune (*Stadtgemeinde* or *Landgemeinde*), serve both as areas for the deconcentrated administration of state functions by officers and bodies directly responsible to the state and as areas of self-government by elected local authorities. There are in this way two distinct systems existing side by side. A "central" service in Prussia as in France is usually administered by a territorial servant or delegate of the responsible ministry. This may be an official, such as the *Regierungsrat*; a mixture of officials and laymen selected by local authorities and approved by the central government; or as a third alternative the locally elected authority acting as agent (the *Landrat* and *Kreisausschuss*). The local state officials exercise police functions, which in Germany include matters relating to public order and safety, the enforcement of the public health code and the building laws. The state control over local authorities may be exercised by two or three grades of supervisory authorities in addition to the state ministries.

There is much diversity in the various systems of local government prevailing in Germany, and at least half a dozen distinct types can be distinguished. But in nearly all of them the outstanding characteristics are, first, the existence of both a representative or deliberative body and a separate executive organ and, second, the predominant position occupied by the burgomaster, who is not only the chief of the executive but also frequently the president of the deliberative or legislative council. The burgomaster has always held a commanding position. He is a salaried official appointed by the local authority for a long term of years or for life, whose function it is to control and direct the action of the locally elected council. He is at once a state official and a municipal officer.

In Russia traces of a rudimentary form of local government are to be found as far back as the sixteenth century in the meetings of the landed gentry in garrison centers to elect town com-

manders and assessment officers. The gentry in each province became in this way a sort of county corporation. Other groups were formed for suppressing highwaymen and robbers, the elders being elected by popular assemblies drawn from all classes. Officers were also elected for fiscal administration. All this machinery was used by the state for its own purposes to such an extent that its operation came to be regarded as a burden rather than a privilege. In the seventeenth century, when Russia was being reconstructed by the early Romanovs, the local elective system broke down and was superseded by a centralized administration under commanders responsible to Moscow. But the remnants of self-government persisted, particularly in the village communities of the serfs (see VILLAGE COMMUNITY), and at the end of the century the towns were granted powers of municipal government which were placed in the hands of the upper merchant class. In 1775 under Catherine II the gentry were organized to participate in provincial government and were formed into a closed hereditary order with corporate rights. A subsequent development made the government of each province the joint business of the imperial official and the elected representative.

The most striking change in prerevolutionary Russia took place in 1864, when Alexander II introduced a large scheme of local government reform as a liberal reaction against his father's autocratic rule. The zemstvo act provided for the establishment of provincial and district zemstvos based on popular election in some thirty-four provinces. They were given extensive duties in regard to such matters as poor relief, highway maintenance, hospitals and public health, the promotion of education and agriculture. The civil parish (*volost*), a communal unit which is thought to be traceable to the mediæval period, was revived for administrative and judicial purposes on an exclusively peasant basis.

These local government reforms in Russia, like the Stein reforms in Prussia, were essentially connected with the emancipation of the serfs. It was no mere chance that only three days after the signing of the Emancipation Manifesto of 1861 a commission was set up at St. Petersburg to work out a scheme of rural local government. The rule of the feudal lord had been abolished and a system of civil administration was required to replace it. The liberated serf was now a citizen and was entitled as such to participate in the government of his locality. The zemstvo movement became the field of a long and bitter con-

flict between the reactionary government bureaucrats, the believers in absolute monarchy and the serfless landlords on the one hand and the liberal democrats who desired to promote political progress on the other. The popular basis of the *zemstvo* was weakened in 1890 by the introduction of the class principle of representation. Every event of national importance, such as the revolutionary outbreak of 1905, the Russo-Japanese War and the World War, was significantly reflected in the status and progress of the *zemstvos*.

The introduction of the soviet (*q.v.*) technique by the revolutionary government of 1917 transformed the administrative as well as the legislative machinery of Russia. The basic unit of the highly centralized hierarchy of soviets was the functional economic group, limited to workers or peasants but otherwise popular in its electoral and deliberative procedure. Although the older administrative areas associated with the *zemstvo* regime have been found a convenient apparatus in a period of transition, the attempt is being made to substitute gradually a new system of regional division better adapted to the realities of economic geography. During the early years of the transition period the urban local units were the dynamic factors in the consolidation of proletarian power, but with the growing realization that many of the crucial questions involved in economic planning centered in the rural areas attention began to be directed to the problems of the local village. The long established tradition of local communal deliberation has proved itself capable, with a slight leavening of active supervision by resident members of the Communist party, of removing from the shoulders of the overburdened bureaucracy many of the day to day problems of local administration, particularly in the field of agricultural production.

The tradition of local government has been especially strong in Hungary and Bulgaria despite the fact that both suffered for a number of centuries the autocratic domination of Turkey. The tradition of a vigorous and to a unique degree independent county government controlled and administered in the interests of the military—and later agrarian—nobility is traceable to the times of the first Hungarian king, although it did not become firmly established until the fifteenth century. During the succeeding centuries the former vigor of the central government was extinguished, at the hands first of the Turks and then of the Austrians; but the sense of Hungarian integrity and of administrative continuity per-

sisted, on occasion flaring up into aggressive nationalistic movements, in the county assembly (*congregatio*) of the "aristocratic republics," in the county courts and among county administrative officials, such as the sheriff (*foispan*). As a reflection of the democratic movements of the nineteenth century the county organization was widened, representation being granted to the newly enfranchised peasant communes. In 1876 and still further in 1891 the autonomy of the counties was restricted by the delegation of new powers to crown officials, while in the latter year the county was divided into circuits presided over by justices of the peace. The traditional administration of the Bulgarian commune derived from the Slav rural organization. Even under the Turkish conquest various towns and villages obtained privileges, such as the right to elect their own mayors and elders, which were not infringed until the eighteenth century. Provided the requisite contingents for the Turkish army and other forms of tribute were duly furnished, an almost complete measure of self-government was accorded to the localities, a tradition which has persisted with some modifications down to the modern period of centralization.

The tradition of local government in Spain is intimately bound up with the separatism which is such a marked characteristic of Spanish administrative development (see REGIONALISM) and with the struggles of the town (see MUNICIPAL GOVERNMENT) and leagues of towns (*hermandades*) to acquire privileges (*fueros*) during the late mediaeval period and to preserve them against the encroachments of the later centralizing monarchs. The essentially municipal character of the local government movement in Spain is reflected in the early administrative problems of the Spanish colonies in America. In contrast to the English and the French the Spanish colonizers organized the administrative areas around municipalities. Both in the early colonial period and in the later democratic movements of the nineteenth century—in the mother country as well as in the colonies—the struggle for the acquisition and preservation of local liberties was the function to a striking degree of the towns.

In the English as well as in the Spanish areas of the New World the early forms of local government were largely determined by the influence of the mother country. In the United States some twenty-four municipal charters were granted during the colonial period (1641-1765), not all of which, however, were effective. The charter in colonial times emanated from the

crown and issued through its representative in the colony, the governor or the proprietor. The early colonial charters followed closely the English model, and even after the revolution the charters still bore a strong resemblance to the original type. During the colonial period there was little opportunity for extensive development in this field. The English settlers brought with them ready made conceptions of law and government, and from the beginning the new municipal corporations, which reproduced the leading features of the English model regardless of their suitability, lacked vigor. The insistence on corporate rights, corporate property and corporate privileges was transferred to American soil at a time when their usefulness had already passed in England. The idea of the public welfare had little place in English ideas of local government during the colonial era. The American municipalities declined rapidly in quality and attainment during the eighteenth century.

In 1796 Philadelphia adopted a form of city government whose principles closely resembled those on which the state and federal governments were organized. It consisted of a bicameral system with select and common councils chosen for three years and one year respectively by the electors of representatives. The systems of checks and balances and the principle of the separation of powers were embodied in the new constitution. A similar constitutional tendency was followed in many other cities.

One of the main effects of the revolution was that municipal charters were no longer granted by the governor but by the state legislature. The charter, in short, became a statute. This entirely modified the relations between municipality and state. Under the old regime the cities were entirely free from legislative interference, whereas they now fell under the complete domination of the state legislature. In consequence municipal autonomy was virtually destroyed during the second half of the nineteenth century. Little progress was made in American city government until the introduction of the commission plan in Galveston in 1901 started a movement for the abolition of the separation of powers in local government and demonstrated the advantages of a strong executive. At the same time a number of states began to confer home rule powers on the cities, thereby relieving them of subordination to the state legislature.

The county is the most common area of local government in the United States, and here again the English ancestry can be traced. Most of the

American colonies had been divided into counties before the revolution, and toward the end of the seventeenth century elected boards or justices of the peace carried on local administration in a manner not unlike that prevailing in England. After the Civil War counties were created throughout the country and new responsibilities placed on their shoulders. The old system of elected officials still prevails as a rule in the counties and no attempt has been made to establish adequate representative councils.

The English influence has also been important in the self-governing dominions of the British Empire, with the notable exception of the Union of South Africa, which has as yet failed to evolve a satisfactory form of self-government for other than municipal areas. In Canada the first city charters were granted to Quebec and Montreal in 1832. Municipalities were created throughout Lower Canada in 1854. Each of the separate provinces of the dominion has power to organize within its area whatever system of local government it chooses, and most of the municipal authorities have been constituted by the provinces during the last fifty years. They are founded for the most part on English principles with certain modifications borrowed from the United States.

In Australia again the colonial period has left a lasting mark. The early settlers took possession of the entire country, which was then administered by a governor in the name of the king. It was later divided into a number of colonies, each with a separate government exercising authority throughout its territory. No organ of local government was evolved spontaneously without reference to the central government of the colony. Hence every local authority owes its existence to imperial or colonial legislation; and the governor in council of each state of the commonwealth still possesses large powers of supervision and control over the local administration, which he exercises on the recommendation of the various departments of state. The urban local government areas consist of cities, towns, municipalities or boroughs; the rural of shires or districts.

Instructions sent in 1840 by the British government to the first lieutenant governor of New Zealand authorized him to divide the colony into districts, counties, hundreds, towns, townships and parishes, but this power was not utilized to any extent. Five years later the Public Roads and Works Ordinance enabled the settlers in any district to cooperate for purposes of local administration. The Municipal Corporations Act of 1867 permitted new districts to be incorporated on

the petition of one hundred ratepayers, if certain conditions relating to the area were fulfilled. The most important year in the history of local government in New Zealand was 1876, for the provinces were then abolished and the country was divided into sixty-three counties, all but six of which being placed under the control of an elected chairman and council. Another Municipal Corporations Act passed in the same year enabled all localities fulfilling specified requirements to be constituted boroughs. These enactments have long been repealed, but the broad structure of the present system is based upon them. A statute of 1882 authorized the formation within the counties of town districts, which are subject to the control of the county council.

In the East the most interesting phenomena in the sphere of local government are to be found in India. In ancient India the *Sabhā*, an essentially communal assembly restricted almost entirely to Brahmans, constituted the supreme governing body of the village; while the *Urār*, a territorial assembly less exclusive as to caste and creed, was carried to a further stage of development in the *Nāṭṭār*, or district assembly; there were still larger groupings of the same kind. Each city was administered by a body called *Nagarattār*, the assembly of the *nagara*, or city. The arts and crafts had their own vocational guilds, but for civic purposes there existed many composite and federal bodies in which Brahmans, artisans and merchants met together.

The most important survival of the traditional organization is the *panchayat*, or village council. The term *panchayat* denotes either a general meeting of the inhabitants or a select committee, a council of village elders, chosen from among them. The village communities have always had their staff of functionaries, such as the headman, who collects revenues, settles disputes and exercises general superintendence over the affairs of the village; the accountant; the watchman; the schoolmaster; and so forth. Some of these officers have become in British India the servants of the government rather than officers of the village community, and this may be one cause of the decline of the *panchayat*. In many of the half million or more villages of British India the inhabitants undertake for themselves the management of private schools, the maintenance of tanks and wells, the settlement of small disputes, the administration of village credit societies, the distribution of water in irrigated lands and other services which concern persons of all castes and creeds.

It was not until the middle of the nineteenth century that the elective principle was introduced in the presidency cities of Calcutta, Bombay and Madras. Between 1842 and 1862 municipal institutions were established by legislation in other towns, either at the option of the inhabitants or later at the instance of the provincial governments. As a result of the efforts of Lord Mayo in 1870 and of Lord Ripon in 1882 to further the participation of Indians in municipal administration there was passed a series of provincial acts providing for the election of a larger Indian element to the local authorities, and at the same time a pronounced impetus was given to the improvement of rural local government. The typical form consisted at first of a rural board exercising power over a large area; a proportion of the members were elected by the local taxpayers and the board was presided over by the district officer. The domination of the local board by this officer, who is the servant of the central government, proved a definite obstacle in the development of local government in any real sense. After the passing of the Government of India Act of 1919 new provincial legislatures were constituted on a more autonomous basis and local government affairs were transferred to ministers responsible to those legislatures. As a result the district officer was replaced on the rural board by an elective chairman.

The district board is now the most important unit in the country districts. It has an elective majority based on a franchise of 3.2 percent of the population. In Bombay and the United Provinces the Moslem electorates are provided with separate communal representation; while in other areas representation is secured for minorities by the provincial government's power of nomination. An attempt has been made within recent years to revive and strengthen the village *panchayats*, which in most provinces are now almost entirely elective. Local boards have also been set up in most provinces as subordinate agents of the rural board to administer parts of the district.

In Japan the reform of local government in the nineteenth century was connected as in Prussia and Russia with the abolition of feudalism. Prior to the Meiji era (1867-1912) there existed nothing in the way of municipal institutions. Each feudal clan had certain officials who carried on local administration, and the shogunate governed. Feudalism was abolished in 1871. The renaissance which occurred during the Meiji period resulted, so far as political affairs were

concerned, in the setting up of a strong central government. In 1873 there took place the establishment of the Department of Home Affairs, which has ever since exercised a dominant control over local government; this was followed by a movement directed toward the standardization of municipal institutions and toward the creation of somewhat more democratic forms of authority. Governors were placed in charge of the seaports (*fu*) and the former fiefs (*ken*), and a brief statement was issued by the central government as to the objects to be pursued by local administrators. In 1878 provincial assemblies intended to serve as forerunners to a national assembly were set up in the *fu* and *ken*. Two years later assemblies were established in the cities, towns and villages, into which the older regional areas had been reorganized and classified. It must be noted, however, that in Japan popular representatives have always occupied an advisory or consultative position and have never acquired positive power over the bureaucracy.

In China as in India there existed until very recent times that "aloofness of society from the state" which made it possible for the everyday life of the people to proceed relatively undisturbed by violent changes of government or by the rise and fall of dynasties. The emperor ruled, but he did not pretend to govern. Such government as has existed in China has been carried on in the city and village community. Judged by western standards, however, the Chinese are not accustomed to expect very much government except in the larger cities, although both the right and the opportunity of local self-government form essential parts of the Confucian philosophy.

The twenty-two vast provinces of the Chinese Empire were ruled by imperial governors or viceroys together with a few subordinate officials. The central government had in theory absolute power. In practise its activities consisted largely in controlling the appointment—although to only a small extent the subsequent action—of the officials occupying the higher provincial, prefectural and district posts; the holding of state examinations for the civil service; the collection of taxes and the maintenance of armies. At no time was the central control effective.

Each province was divided for administrative purposes into prefectures (*fu*) presided over by prefects, which were in turn divided into districts (*hsien*) in the charge of magistrates. The *hsien*, comprising a walled city—or in the case of many provincial capitals the half of a walled city—with the adjacent country, was the civic,

political, judicial and fiscal unit. The district magistrate in charge was assisted by treasurers, collectors, constables and other officials. The magistrate himself was the agent of the provincial and imperial governments for certain purposes and was personally responsible. He exercised control over every conceivable subject of local administration from famine relief to the care of temples.

The *hsien* commonly contained a large number of villages which had no legal or constitutional status whatever but which nevertheless exercised considerable powers of local government, carried out through the village elders on a patriarchal basis. An official (*tipao*) was nominated from among the elders to represent the villagers in relation to the *hsien* and other superior authorities. This system, built up through long ages under the Chinese monarchy, was left virtually untouched by the revolution which established the Chinese Republic in 1911.

The survey of the rise and in some cases the fall of local government in the main countries of the world indicates the difficulty of generalizing about phenomena so complex, so diverse, so rooted in the history, the stage of development, the political aptitude and the social characteristics of the various peoples. Two general conclusions, however, emerge as valid. First, local government is obviously the principal arena in which the conflicting principles of centralization and decentralization struggle for supremacy. Where the central government is essentially weak, no matter how absolute its theoretical or legal rights, local administration is bound to prosper, if for no other reason than that the practical needs of the people must be met. Second, every nation which has become a modern state has without exception been compelled during its transition to establish or to reform its institutions of local government.

The modern state is often faced during the course of its evolution with conflicting tendencies. On the one hand, the desire to strengthen the central power and to promote national ends rather than local interests frequently leads, as in France and Italy, to an extreme restriction of local autonomy and a development of the decentralized type of local administration through central officials. On the other hand, the vast increase in the scope of governmental functions makes central governments aware of the need to devolve both duties and responsibilities to local organs. This decentralizing tendency is often reenforced by a recognition of the vital edu-

cative effect on the people of representative local institutions. In England, India, Prussia, Japan, the United States and elsewhere the course of events has shown the impossibility of introducing or maintaining an effective and healthy system of democratic government in nation or state or province unless the larger organs of government are supported by healthy and democratic local councils.

An accurate gauge of the extent to which local autonomy prevails in a country is the degree to which local administration tends toward the decentralized or the deconcentrated type. It is here that a true distinction may be found between the local government systems of the English variety and those founded on the French or German model. In France the department is an area of both deconcentrated central administration and local government. The prefect is appointed by the government and is the local agent of all the central ministries; he is in fact the principal local servant of the central power. He exercises large powers of supervision over communes and mayors. He controls the police and appoints all the school teachers. The representative body of the department, the *conseil-général*, is relatively unimportant. In the commune the mayor serves in a double capacity. He is at once the agent of the central government and the executive head of the municipality. He is elected by the council from among their members, but he can be suspended by the prefect for one month or by the minister of the interior for three months or be dismissed by decree. The communal budget is proposed by the mayor and must be approved by the municipal council, but the final decision is with the prefect or in large towns with the minister of the interior. The prefect may insert additional items of expenditure in both the communal and the departmental budgets. The most striking illustration of the prefectural dominance is the power of the prefect to suspend the municipal council. Education in France is completely under the control of the national Ministry of Public Instruction; the upkeep of the main highways is also centralized.

The German conception of local government consists to a large extent in administration by a highly qualified professional officer checked by but essentially independent of an elective legislative or deliberative assembly and subject to its financial control. This contrasts sharply with the English system, where the fundamental principle consists in the supremacy of the elective

council and the complete subordination of the municipal officers to its decisions. Municipal administration in England is carried out by means of a series of committees of the council, each of which deals with a particular subject, such as education, public health and so forth, and the membership of which consists either wholly or mainly of councilors. In this way all members of the council, although unpaid laymen, participate in actual administration. In Great Britain again there is no deconcentrated control by the state. The supervision or control by the central government is carried out directly by the central ministries, and no local authority or municipal officer or mayor is the agent of the central power.

As regards central control England may be said to occupy a position midway between the authoritarianism of the French system and the extreme freedom enjoyed by American municipalities, especially in the home rule states. The relations between central and local government in England are complex. The central government exercises considerable influence and sometimes direct power through its ability to withhold national grants-in-aid of local expenditure; through the system of district audit of local accounts; and by such means as the approval of by-laws, the inspection of schools and police forces, the right to approve and modify local schemes for housing, town planning, hospital provision and so on. There is no absolute power of general control, however, except perhaps in the case of the poor law. In the United States the separate states have the constitutional right to regulate local government to any extent they desire. But in practise this right is exercised to a relatively small degree and local authorities are perhaps freer from superior control than in any other country. Even where subventions are paid by the state in aid of particular municipal services, such as education, inspection or supervision by the state does not commonly occur. The state is regarded as occupying an advisory rather than a supervisory position. The county, however, occupies a dual position in the United States not unlike that filled by certain areas of administration in Germany. It is at once a subdivision of the state for the enforcement of state laws and a district for the purposes of local administration. With comparatively few exceptions county officers are popularly elected. The principle of directly electing executive municipal officials is peculiar to the United States. It arises partly from a desire to separate

powers, partly from the theory of a system of checks and balances carried into the sphere of local government and partly from Jeffersonian ideas of democracy. Nevertheless, during the past two decades the rise of the city manager (*q.v.*) plan has been a most conspicuous feature of local government in the United States.

In Italy, which after its unification had adopted the main outlines of the French system, local autonomy has been almost entirely abolished by the Fascist regime. The responsible authority in each commune, except Rome and Naples, is the *podestà*, an unpaid officer appointed for five years by royal decree. The *podestà* exercises all the municipal functions which formerly devolved upon the mayor, the executive committee and the communal council. He is the only executive authority and appoints all the officers of the commune. His decisions are subject to the control of the provincial prefect.

In the larger communes the *podestà* is assisted by a council appointed by the prefect, two thirds of the members of which are selected from panels submitted by local syndicates and recognized economic organizations. The council is endowed with advisory powers only; it is summoned by the *podestà* at his discretion and expresses opinion on matters submitted to it by him; in regard to certain questions, however, such as the budget estimates, loans and taxation, the opinion of the council must be asked. If there is a difference of opinion between the *podestà* and the council, the *podestà* decides as he thinks fit. In the Italian provinces a system resembling the French prefectorial scheme is in existence, while in Rome a governor and in Naples a royal commissioner replaces the *podestà*. The governor is supported by a body of rectors appointed by the minister of the interior, each of whom is responsible for a specific branch of administration.

The various systems of local government may be divided into those in which general powers are conferred on the local unit and those in which only specific powers are granted. In France the communal council possesses legal power to embark on any activity considered desirable for the welfare of the locality, and in Germany a similar general power has been possessed by local authorities in most states since the days of the Prussian municipal code of 1853. In England, on the contrary, local authorities are permitted to perform only those functions which they have been expressly au-

thorized to perform by public or private act of Parliament, royal charter, statutory rule, provisional order or other legal document emanating from the king in Parliament or the central executive. This principle of confining the activities of local authorities to enumerated functions is judicially enforced by the legal doctrine of *ultra vires*. In the United States the municipalities in the home rule states have general powers within the limits set by the state constitutions; elsewhere the doctrine of *ultra vires* applies.

It is obvious that an accurate understanding of the powers possessed by local authorities can be gained only by considering the general context of central control exercised over local authorities. The constitutional freedom of the French commune is severely limited by the power of the prefect over finance, by the power to suspend the council and by other restrictive factors; while in Germany the reservation by the state of police functions and the requirement that local authorities must obtain state approval for many of their proposals circumscribe in practise the legal power of the municipal councils. It is worth noting that countries frequently change from one system to the other and sometimes apply both simultaneously. Thus the doctrine of *ultra vires* did not exist in England before the 1840's; Japan changed deliberately from the system of general to that of enumerated powers; while in Germany the powers of local authorities higher than the commune are specified in order to avoid conflict with the unlimited powers of the latter. But even allowing for all modifying influences, it may be asserted that in England, the United States, Australia, Canada and New Zealand reliance is placed on legislative and judicial control, whereas in France, Germany, Italy and Japan the emphasis is on administrative supervision by higher authorities. The private act of Parliament whereby the legislature confers powers on a particular locality has been extensively employed in England but appears to be unknown elsewhere. It is unconstitutional in the United States, although a state legislature can legislate for a "class" of local authority of which only one example exists within the jurisdiction.

The actual functions of local government are most varied. There are certain services, such as water supply, sanitation, poor relief, the upkeep of at least the minor roads, which are everywhere in the hands of local authorities. On the other hand, whereas education is a national service in

France, in the United States it is regarded as a peculiarly local function requiring special education authorities distinct from the general municipal bodies. Similarly, the control of the police force is a jealously guarded preserve of the English boroughs, while in Germany it is the concern of the state. Two distinct trends may, however, be emphasized. First, the scope of municipal activity has been greatly widened in recent times in regulating the conduct of citizens and more especially in the direction of providing services for the people, such as housing accommodation for the poorer classes, the operation of gas and electric supply utilities, the running of transport services and other forms of so-called municipal trading. In the second place, the growth of these and other services has had the effect of making local government far more important than central government in the daily life of the average citizen. The services which touch family and home life most intimately, such as the provision of health services, maternity and child welfare clinics, playgrounds and parks, general and technical education, the supply of water and gas and electricity, even the provision of the dwelling itself—these are tending more and more to be the affair of the local authority.

The interest shown by citizens in the work of the local council and the caliber of those who serve on it manifest wide variations. A very high point of excellence is reached in Switzerland, especially in the German cantons, where local self-government is perhaps more truly democratic than in any other country. In Germany and in England also, especially in the towns, civic feeling of a high order is to be found as well as in Holland and the Scandinavian countries. In the United States an exceptionally mobile population, a vast immigrant influx, a mixture of races and cultures and a great concentration on economic activity have proved, with a few notable exceptions, unfavorable to the development of any considerable popular interest in local government and this in turn has led to corruption in municipal politics.

The degree to which local democracy exists depends to no small extent on the effectiveness of the municipal organization, and this again is related to the constitutional structure. It is impossible to describe here all the variations in the size, shape and character of the areas of local government in the different countries of the world. Their irregularity and irrationality are conspicuous in an old country, such as England,

where the administrative divisions are to a large extent a heritage of past ages and where the determining factors are irrelevant to modern conditions. Their uniformity is most noticeable in new territory, such as the west and middle west of the United States, where the "congressional townships" consist of areas six miles square. But neither irregularity nor uniformity is the test of suitability. In nearly all the countries where extensive industrial development has taken or is taking place the areas of local government are proving too small for optimum efficiency. As a result of the technological revolution the areas of local government are often too small to include both the place of work and the place of residence of great masses of the population and have produced serious administrative and financial problems in such countries as Germany, France, England and the United States. At the same time new municipal services, such as town and country planning, public health functions calling for highly specialized experts and institutions and public utility undertakings requiring large scale operation, have created a similar demand for enlarged areas of jurisdiction. In nearly all the leading countries the areas of local government were determined before the advent of modern improvements in communication; and in none of them has there been any systematic attempt to bring the size and shape of the areas into accord with the trend of social and economic evolution. The result is that almost every country contains large numbers of local governing authorities whose areas are too small, too sparsely populated and too poor to respond adequately to the demands which are made upon them. The problem of areas is complicated by the dogged insistence with which ineffective local authorities claim the right to continue in existence.

Another phase of the problem of local government is the degree of simplicity which is to be found in the various systems. In the United States, Germany, England (outside the county boroughs) and elsewhere there are several layers or levels of administrative authority having jurisdiction over the same or overlapping local territory; whereas in Australia, for example, there is one and only one local authority in any area. The complexity resulting from overlapping local authorities tends to confuse the public mind and thereby to weaken public interest in municipal affairs; at the same time it diminishes the efficiency and economy with which local administration as a whole can be carried on.

The tendency toward increased central con-

trol, so marked at the present time, has sprung from several causes. The enlarged scope and importance of municipal functions have stimulated in central or state governments a sense of responsibility for their proper execution or at least their performance. The huge increase in municipal expenditures has made it necessary for grants or subventions to be made from national and state funds. The world wide economic depression and the acute financial situation existing in many countries have given the activities of local authorities in regard to poor relief and the promotion of public works a national importance which they never before possessed and which no central government can ignore. The inadequacy of many areas of local government has not infrequently compelled the intervention of the central government. For these and cognate reasons the power of the German *Reich* has increased in comparison with that of the municipalities and of the states; in England the central departments and especially the Ministry of Health have acquired a degree of control and influence over local authorities far in excess of any hitherto known; and even in the United States there is without doubt an extension in the power of the state governments over the local authorities.

Despite this tendency local authorities have greater opportunities today than ever before. If the powers of the central governments are increasing, so are the powers of the local councils. With the general extension in the scope of municipal government there is a growing recognition of the necessity for a well trained professional service to carry the burden of local administration. The elected councilor is ceasing to believe that he can govern wisely or efficiently without the aid of the expert official. Emphasis is therefore being placed in many countries on the need for improvement in the methods of recruitment, education, training, pay, status, conditions of service and ability of local government officers. At the Fifth International Congress of Local Authorities held in London in 1932 one of the two subjects tabled for discussion was the training of local government officials.

One of the most difficult problems of local government is presented by the administration of the great metropolitan areas. Attempts to solve this problem are being made in a number of countries, and plans are being put forward to obtain a more effectively unified type of metropolitan government by such means as the federation of existing bodies, the creation of larger units or the setting up of ad hoc bodies to deal

with particular services over the entire area. This question may serve as an interesting illustration of the way in which the same type of problem springs up in the field of local government in all countries which have reached approximately similar stages of economic and social development. The great diversity in the history and the character, the structure and the functions, of the various systems of local government is impressive, but equally so are the similarities of form and feature, of growth and decay and renewal, of problem and solution, to be observed among many unrelated sets of municipal institutions.

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See: GOVERNMENT; COUNTY GOVERNMENT, UNITED STATES; COUNTY COUNCILS; MUNICIPAL GOVERNMENT; MUNICIPAL CORPORATION; CITY MANAGER; VILLAGE COMMUNITY; COMMUNE, MEDIAEVAL; SOVIET; POLICE POWER; LOCAL FINANCE; GRANTS-IN-AID; CENTRALIZATION; DECENTRALIZATION; FEDERALISM; REGIONALISM; AUTONOMY; COUNTY-CITY CONSOLIDATION; ADMINISTRATION AREAS; METROPOLITAN AREAS; REGIONAL PLANNING; PARTIES, POLITICAL; MACHINE, POLITICAL; CORRUPTION, POLITICAL; SHERIFF; CORONER; JUSTICE OF THE PEACE; POOR LAWS.

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LOCAL OPTION. *See* PROHIBITION.

LOCALISM. *See* REGIONALISM.

LOCALIZATION OF INDUSTRY. *See* LOCATION OF INDUSTRY.

LOCATION OF INDUSTRY. The location of industry is bound up with geography as well as with economics, for geographical differences affect the life of man, while man in turn reacts upon and changes the surface of the earth. As long as the forms of economic life remained simple, a descriptive study of territories and states, such as that of Montesquieu, was sufficient and political economy could ignore the problems of spatial separation and distribution. It was not until the advent of a free dynamic system of economic arrangements that such questions attained any appreciable theoretical

importance. Thünen could develop his theory of agricultural location, for example, only after the disappearance of the rigid three-field system of peasant economy. Industry too was for long almost as definitely restricted by historical factors. Throughout the mediaeval period handicraft was tolerated only in the towns. Home industries alone flourished in the rural districts, especially in mountainous regions where conditions for the development of agriculture were poor. In the mercantilistic period there were in addition direct attempts, particularly by Great Britain, to prevent the development in the colonies of manufactures other than those of local importance. These artificial limitations were superimposed upon natural obstacles to rational distribution of industry; in the North American colonies, for example, all industrial development was confined to the narrow coastal strip where the original settlement was concentrated. Complete freedom of movement for industry was effected everywhere at a rather late date. In Europe it was brought about by the abolition of the mediaeval economy, elsewhere by the collapse of the old colonial system. In new countries such as the United States the spread of settlements over the entire country was another prerequisite; only then was industry able, with the aid of the new technique of steam transportation, to exercise a free choice of location and to correct economic deficiencies in traditional locations.

Another reason for the neglect by early economists of the problems of location was their difficulty. It was not easy to integrate the differences of agricultural location into a causal explanation, and the variegated picture presented by industry was even more puzzling. While the question of the "natural" location of industry had been touched upon in passing by such writers as Sonnenfels and Büsch, the first broad treatment of the problem is found in Roscher's article, "Studien über die Naturgesetze, welche den zweckmässigen Standort der Industriezweige bestimmen" (in his *Ansichten der Volkswirtschaft aus dem geschichtlichen Standpunkte*, 2 vols., 3rd ed., Leipsic 1878, vol. ii, p. 1-100), which suffers, however, from the superficiality of theoretical discussion and the failure to synthesize the assembled mass of historical material. Roscher's analysis was supplemented in important particulars by the American E. A. Ross ("The Location of Industries" in *Quarterly Journal of Economics*, vol. x, 1895-96, p. 247-68) and by the Frenchman Maunier ("La dis-

tribution géographique des industries" in *Revue internationale de sociologie*, vol. xvi, 1908, p. 481-514). More important, however, was the fact that in the meantime the entire problem was approached quite differently by Launhardt in his mathematical study, "Die Bestimmung des zweckmässigsten Standortes einer gewerblichen Anlage" (in *Zeitschrift des Vereines deutscher Ingenieure*, vol. xxvi, 1882, cols. 105-16). Alfred Weber was the first to undertake to coordinate all these disparate efforts and to offer comprehensive treatment. The publication in 1909 of his *Reine Theorie des Standorts* gave rise to a theoretical discussion which has not yet abated and secured for the subject permanent importance in scientific literature. Although Weber never published the promised second part of his theory, which was to be "realistic," he edited a collection of studies of location of individual industries, and similar studies by other investigators followed. Weber's theory, unlike Thünen's, has not successfully met the test of subsequent criticism; it offered a powerful stimulus to further study rather than a definitive solution. It has been attacked from all angles, as by Engländer and particularly by Predöhl and Ritschl; but criticism has been constructive and has helped to clarify the outlines of a new and unified theory, in which there is no longer a distinction between the "pure" and the "realistic." These doctrines, moreover, were developed further in application to business economics and incorporated in practical economic disciplines. Especially in the United States, where the general theory has been developed but slightly, its implications have been reflected in studies of scientific marketing, such as W. Gerald Holmes' *Plant Location* (New York 1930).

While the doctrine of location has certain general aspects it is radically affected by an empirical distinction between those branches of production for which location can be chosen freely and those for which it is predetermined. In agriculture location is usually fixed; the factors of labor and capital must be adapted to the soil, and location governs production. In industry, on the other hand, location may be selected freely and land adapted to labor and capital; location is conditioned by the requirements of production. While it is important that the unity of the problem should not be overlooked, this basic difference renders inadvisable the formulation of a doctrine of location to apply uniformly to agriculture, industry and trade; attempts at the construction of such a unified

theory have generally failed. More specifically, the peculiarities of industrial location cannot be set forth clearly within the framework of a general theory.

The factors peculiar to industrial location, which are exceedingly numerous, are not always apparent, for the historical circumstances which have conditioned the location of the older industries are in many cases difficult to ascertain. Effective location factors are therefore most clearly indicated when industries move. Of these one group require only brief mention because they create in industry a situation similar to that in agriculture. The location of mining enterprises is the clearest illustration of their operation. Industries depending on water whether for power or for other purposes, as in the case of certain chemical, paper and leather manufactures, are in an analogous position. Similarly the presence of facilities for drainage, often more important than adequate water supply, and such characteristics of certain manufacturing operations as noise and odor may definitely fix location. While such restrictive factors could be omitted from consideration, the theory of location of industry must encompass all others, for each specific factor can be assigned its proper place only when the entire complex has been outlined.

The most important of the numerous factors which affect the free choice of industrial location is, as in Thünen's doctrine of agricultural location, orientation toward the market to which the output of the plant must be delivered. Transportation costs thus incurred are determined on the one hand by the weight and bulk of the products and the distance over which they are transported and on the other by the scale of freight rates. None of these determinants is fixed. Progress has been made in lowering the weight of the transported commodities, in shortening the distance separating the plant from the market and above all in reducing freight rates. So long as only natural traffic routes were available, natural conditions occasioned marked differences in freight rates, considerably equalized, however, by local taxes and dues. Even at present natural conditions exercise an important influence on transportation costs, particularly in the case of natural routes of great capacity, such as the sea, large lakes and long inland waterways developed for navigation. On the whole, however, the railroad has emancipated transportation from the limitations of natural routes and made equally accessible out-

lying points in every direction, a condition previously unknown. While it reduced the significance of transportation facilities as a location factor, it has introduced railroad rate policy as an important device for encouraging or impeding migrations of industry. The advent of the automobile in recent years has further increased the accessibility of distant points and reduced the importance of distinctive locations; at the same time the automobile has virtually eliminated the differences between the use of the railway and of the highway and impaired the effectiveness of railroad rate manipulation for location policy purposes.

Next to the market the factors of production constitute a most important consideration in industrial location, more vital in industry than in agriculture. Among these, however, land is not of outstanding significance. In industry, as contrasted with trade, land rent is of immediate practical concern only when an enterprise is to be established or extended. While a rise in rent may drive industries from central locations in large cities to the suburbs, as a rule it merely supplements a trend toward change of location due to other causes. The production factors, labor and capital, exert much more influence upon industrial location. The bearing of labor on location is very involved; one must consider the local wage rates, expenditures enforced by social legislation, the productivity of labor in its quantitative and qualitative aspects as well as its tractability. The factor of capital presents still greater complications. In the case of fixed capital, interest, like rent, is of importance mainly in the establishment of new or in the enlargement of old plants. Although differences in interest rates are often decisive for the introduction of an industry into a foreign country they do not constitute a permanent influence, for the tendency toward equalization of prices of articles entering international trade extends also to interest rates. Working capital, comprising raw materials, fuel and similar goods continually used up and replaced, is of much greater importance than fixed capital. In the literature of the subject fuels are usually classed with raw materials, but they are in fact much more subject to technological innovations. In this connection two major changes should be noted: first, the substitution of coal for wood and the consequent movement of industry toward the coal regions; second, the change now in progress, the substitution of electricity for steam. Since electricity is by now available almost

everywhere, the coal regions are largely ceasing to attract industry, a tendency which would be even more marked if coal were not also changing from a fuel to a raw material. The availability of power resources, which for long had been a prime consideration, is thus becoming almost negligible as a factor in location; this is perhaps the most far reaching change which has thus far taken place in the geographical distribution of industry.

Numerous factors of a non-economic character also affect location of industry. Of the geographic factors the most important is that of climate. Indeed Friedrich List regarded climate as the principal factor governing the distribution of industry; the temperate zone, he maintained, was the natural seat of machine industry, while the tropics were unsuited to manufacturing. Today it is known that man can lessen the effect of climatic differences; physical exertion entailed by work has been reduced, and tropical heat may now be mitigated with the aid of artificial ice and electric refrigeration. Furthermore natives of tropical countries have proved to be more educable than was formerly held possible. All sorts of industries, especially mines and iron foundries and textile manufactories using tropical fibers, have been established in the tropics. It cannot be denied, however, that while some climatic influences important in the industrial process, such as humidity, can be offset by artificial methods, climatic differences will always remain of consequence.

Racial differences, which are in part related to climate, are less important. The machine is becoming the common property of all peoples, and the handling of industrial apparatus has ceased to be the monopoly of a few nations; the old position of predominance is becoming confined more and more to the maintenance and improvement of equipment, although in this sphere the existing differences between peoples are insufficiently appreciated. National peculiarities of political organization also produce differences in institutional arrangements. Taxation, for example, is a factor affecting industrial location; where high taxes are not offset by corresponding advantages they cause eventually a shift in location.

In addition to these factors, which are beyond the power of any single individual, location is influenced by certain arbitrary choices. Inert obedience to custom, the all too human desire for comfort, the benefit expected from educational and recreational facilities, may override

the cold logic of strictly economic calculus. Again, for reasons of their own municipalities may attract industries by offering special privileges such as land grants or financial inducements. These are but instances of irregularities in location produced by arbitrary and accidental factors; their influence, however, tends to decline with the increasing displacement of private business by the corporation.

Once an enterprise has become established, the factors which influenced its location may lose their potency, although powerful forces of inertia may discourage change. The greater the fixed capital, for example, the more difficult is shift to other regions; in such a case a reduction in profits is usually considered the lesser of the two evils. Actual removals are thus rather infrequent, being caused usually by exhaustion of raw materials or by radical changes in the power economy. It is the new enterprises which usually become established in more favorable locations, thus pushing the older firms to the margin and bringing about their slow extinction. This is to be regarded as the normal type of industrial migration; it may of course be occasioned by changes in any of the factors which determine location, particularly the market, labor or raw materials.

Historically, industrial location with a view primarily to market proximity, which may be considered the original normal type of location, assumed two forms. The oldest and most widespread form applying to workshops dispensing rough artisan products was their distribution over a certain area paralleling the distribution of population. The other form of market orientation applied to the luxury trades which early sprang up alongside the ordinary crafts in upper class and aristocratic centers. All large cities, especially capitals, from antiquity to the beginning of modern times were centers of luxury industries, which were often promoted by the authorities. Only with the rise of the middle classes did the democratization of luxury consumption lead to shifts in location.

Later changes in location start from a condition of industrial localization caused by such twofold market orientation. Even where such orientation persists its influence is modified and there is a corresponding change in results. As improvements in transportation enable the individual producer to supply a larger share of consumption than is centered around the local market, the number of establishments in any single industry and with it the number of loca-

tions decrease. This process of concentration is accompanied by a differentiation between older countries and those which are still being settled. They differ not merely in the rate of development but in the phenomena attendant upon it; in the younger countries population grows largely by immigration, which creates new mass markets in the interior of the country, whereas in the older countries the natural increase in population is uniformly distributed and does not give rise to new centers of consumption. Only in foreign countries could a nation like Germany obtain new mass markets comparable to those which appeared in the western states of the United States. The influence on industrial location exercised by the domestic market is, however, quite different from that of a foreign market. The domestic market requires a central location from which all its sections can easily be reached; the foreign market, on the other hand, attracts industries to the periphery of the country, especially when ocean transportation is available. Such a distinction is of slight importance for England, where the distance to the seacoast from any inland point is so short that even domestic commerce can often take advantage of cheap coastal shipping. Nor does the conflicting influence of the domestic and foreign markets assume practical importance until a country has developed a large export trade. In the United States, for example, the antagonism remained latent, but where it became manifest it was acute because of the enormous distances involved. This situation led the Standard Oil combination to adapt its organization to a dual market attraction by establishing two great distribution centers, one on the Atlantic coast near New York, the other in the center of the continent near Chicago. In Germany, with its much smaller area, similar developments appear only in isolated instances, as in the iron and steel industry. It is much more typical that before the World War German foreign markets tended increasingly to attract large scale industries to the seacoast and the shores of the Rhine.

Orientation toward the domestic market predominates wherever settlement is still in process. For a long time this fact accounted for the most characteristic peculiarity of industrial development in the United States. With the exception of a few branches which could serve an unusually large marketing area, industry followed population westward. This shift, however, did not constitute an industrial migration in the

proper sense of the term unless other location factors were involved. In the east plants were not dismantled; industry expanded merely in the measure dictated by the increase of population. The general westward movement has recently subsided, if it has not ceased altogether. In so far as the movement of industry is an aspect of the migration of population it was brought to a standstill by the post-war restriction of immigration. Another factor was the opening of the Panama Canal in 1914, which established closer economic ties between the east and the west coast than those which exist between the Pacific coast and the middle west. The operation of the Panama Canal and the realignment of rates since the war have resulted, for example, in moving Chicago away from the Pacific coast on the average about \$3.36 per ton of staple goods, while moving New York \$2.24 nearer. Every place east of a line passing approximately through Cleveland has been afforded preferential treatment in reaching the Pacific coast through the new ocean route. The further growth of the middle west is now impeded by both of these factors; in fact movement out of this region is becoming noticeable here and there.

The labor factor may affect choice of location in many ways. Since labor is divided into a great many groups, the interchangeability of which for the purposes of a particular industry is rather limited, location with reference to the labor market is possible only if all the requisite labor groups are present; hence the larger the labor market the easier is the orientation toward labor, and this despite the fact that in large cities wage rates are as a rule higher than in small towns. Wage rates alone are never the deciding consideration. To wages must be added expenditures for labor welfare, more readily ascertainable in those countries where they are made compulsory by law. Such costs are usually reflected in a higher quality of labor performance, which, however, is not easy to evaluate; where the balance between the two lies is just as difficult to ascertain as it is to carry out a comparison between labor cost and labor service. This problem loses practical significance as the cost factor, capital, becomes increasingly important and the employer is forced to value continuity of labor more highly than its cheapness. When the threat of a strike involves a risk so much heavier than the difference of a few points in wage scales, it pays to purchase labor tractability with higher wages. Of late the search

for tractable labor has induced perhaps as many shifts in location as the quest for low paid labor.

Yet there are instances of industrial location which may be described as wage minimum and productivity maximum types. Manufacturers of coarse cotton fabrics have in recent years tried more persistently than ever to locate their plants in wage minimum areas and have caused perhaps the greatest international industrial migration of modern times. Cotton manufacturing has shifted from areas of high productivity and high wages, such as Lancashire and eastern Massachusetts, to industrially backward regions like Japan, India and China, and in lesser degree to the southern states of the United States. In these areas success depends wholly upon the outcome of the race between rising labor cost and growing labor productivity; education and trade union organization have a vital effect upon the outcome, and the results are often subject to wide fluctuation. On the other hand, long established industrial centers, such as Birmingham, Essen and Pittsburgh, attract industry as productivity maximum areas. By virtue of their age and tradition they have developed labor of high qualification, which has increased the drawing power of labor as a location factor. As they developed into quality industries many lines of manufacturing, which at first located more or less by chance, shifted to such centers of high labor qualification, thereby acquiring a rational location.

Location with primary reference to the labor factor derives as a rule from two fundamental conditions. The first is that the proportion of labor costs in the total cost of the product must be high enough to give the labor factor a weight greater than that of working capital and of market; orientation toward labor requires at least that the saving in labor costs exceed the possible saving in transportation costs. This relation brings out certain differences between industries which are traceable to the weight of the raw materials used and which are therefore apt to persist; thus is explained the contrast between cotton manufacturing, in which the labor orientation has always predominated, and the iron industry, subject to much greater pressure of the transportation costs for raw materials. For industry as a whole the widespread decline in the relative importance of labor costs tends to decrease the influence of the labor factor upon location. Formerly it could properly be argued that since the proportion of labor costs rises

as the product approaches the finished stage, the labor orientation ought to manifest itself most clearly in those national economies which are dominated by the manufacture of consumers' goods. At present, however, this is no longer true, because it is just in these industries that capital costs have been gaining in importance at the expense of labor costs. Nowadays local differences in the cost of labor must be very large indeed to induce even a gradual shift in the location of an industry. In fact with the ever increasing "capitalization" of industry as a whole the basis for labor orientation becomes more and more narrowly restricted to preserving continuity of operations and hence to securing tractable labor.

The second condition for a labor orientation is that labor itself be bound to a given locality. This is not always the case. Even in the earlier stages of development labor is not always rooted to the soil. Slaves have always possessed a high degree of mobility. At present Hindu and Chinese coolies are exported to any part of the Pacific and Indian Ocean regions when a new demand for labor arises; and African labor is transported over long distances for work in South Africa and Katanga. In European countries law and tradition have tended to bind labor to its native soil. Among the European workers two major classes have influenced the location of industries. First there is the class of craftsmen, deriving from mediaeval handicraft and the old domestic system, who for many generations have specialized in certain types of work and in many cases have monopolized certain skills. The second is the working population of modern large cities; this group, deriving largely from the more intelligent and enterprising portion of the rural population, has developed a character of its own, having acquired an understanding of technical matters and a faculty for adaptation to changing tasks. For a long period such labor attracted industry. There were, however, notable exceptions; thus the chemical and iron plants built up at Leverkusen and Rheinhhausen in Germany have drawn their labor from the outside. Of late there have been indications of a general trend toward greater mobility, especially among the skilled workers.

In colonized countries labor always enjoys considerable mobility. Immigration extends into internal migration, and local sentiment develops but slowly. Under such circumstances it is unnecessary for industry to choose location on the basis of labor availability; labor may be

counted upon to be attracted to the industry. For this reason factories can be located in sparsely settled regions of the United States much more easily than in undeveloped sections of Europe, and it is natural enough that labor orientation should have been much less important there than in Europe. Exception must be made, however, for the New England states, the area of oldest settlement, where long established industries are now located largely on the principle of labor orientation. Another exception of more recent origin is the location of the cotton industry and still later of the rayon industry in the south; here the motivation is the availability of "poor white" labor. But such exceptions are mainly survivals from the past. Mobility, both physical and mental, is on the increase. The process of deracination begun by the railroad is now rapidly being completed by the automobile; attachment to the native hearth dating from the days of the town economy is being displaced by the much weaker feeling of love for one's country; and economic advantage tends increasingly to outweigh all other considerations. The growing mobility of labor, just as the decline in relative labor cost, indicates the diminishing importance of labor as a factor in industrial location.

Mining excepted, the location of industry with primary reference to the raw material factor occurs only if two conditions are fulfilled. One of them, discussed above in connection with labor, is that the saving in the cost of raw material due to such location must exceed the saving in the cost of labor were a labor orientation followed. This usually occurs when raw materials constitute a larger share of final cost than labor, and—since raw materials cost is composed of the price paid in the market, which is likely to be the same whichever market is patronized, and the price of transportation from the market, which depends on the location of the plant—orientation toward raw materials must be the more important the greater the cost of transportation, that is, the heavier and bulkier the raw materials are. For this reason the location of heavy industry is more likely to be conditioned by the factor of raw materials while that of the garment and textile industries tends to be influenced by the labor factor.

The second condition for orientation toward raw materials is that the savings in transportation costs for the raw materials must exceed savings for the finished product in case of a market orientation; this in turn depends upon

how much of the weight of the raw materials enters into the finished product. Thus the less the difference in weight between the two, the more location for market tends to supplant location for raw materials, even though railroad freight rates are usually higher for finished goods. In the cotton industry, where the difference in weight is slight, proximity to the finished goods markets is of primary importance, unless, as is usually the case, a labor orientation predominates. On the other hand, industries using heavy raw materials tend to be dominated by the raw materials orientation; besides the iron and steel industry, this is characteristic also of many branches of the chemical industry and of the glass, sugar and packing industries. Tobacco, rubber, oil and linoleum industries which use imported raw materials may be said to conform to this rule when they locate near the principal importing centers.

Rational location oriented toward raw materials is often difficult when an industry requires several important raw materials from widely separated regions. In such cases the most advantageous location is readily ascertainable only if the possible saving for one raw material is greater than that for all the others, and raw materials orientation prevails only under special conditions, such as those obtaining in the iron and steel industry, where both the important raw materials, ore and coke, lose much of their weight in the course of production. One of the great initial advantages of the English iron industry was that iron ore and coal were mined in close proximity to each other, so that the transportation charge was exceptionally low, less than one third of the expense of transportation for the German industry; today, however, English iron ore is practically exhausted, and this competitive advantage has disappeared. In the countries which are England's major competitors the ore mines and the coal mines are hundreds of miles apart. There the solution of the problem as to which raw material determines location depends largely upon one factor alone—the iron content of the ore; thus if the content is reduced 50 percent proximity to the ore mines becomes doubly important. Also in the United States at the present time the production of iron involves the use of about twice the weight of iron ore as of coke, and for this reason it has now become possible to effect a greater saving in raw material by shifting the iron and steel industry from the coal regions to the ore fields; the American iron and steel in-

dustry has migrated from Pittsburgh, first to Lackawanna on Lake Erie, then to Gary on Lake Michigan and finally to Carnegie in the ore area at the head of Lake Superior. The movement of the German iron and steel industry from the coal fields of the Ruhr toward the iron ore deposits in Lorraine and Luxemburg was disastrous to Germany, since the newest and best iron works were thus located in the regions which it forfeited as an outcome of the World War.

In general, since the useful content of mined raw materials is decreasing as exploitation proceeds, there is a tendency for industries dependent upon such supplies to seek location nearer the mines. This tendency is, however, counteracted by increasing emphasis on the utilization of by-products, which reduces the difference in weight between the raw materials and the products. The general trend toward location for finished products is thus competing with the somewhat limited trend toward location for raw materials, but this competition is for obvious reasons less effective than in the case of orientation toward labor. This intensification of the finished products orientation, involving on the whole an equalization of existing local differences, must be regarded as one of the most characteristic and widespread recent developments.

It will be appreciated that the theory of location, involving as it does a new problem and a new approach, was not readily assimilated into economics. Its advocates tended at first to interpret it too broadly, and to claim for it independent status. Thus an attempt was made to subsume all problems of "agglomeration" under location theory. While any locational factor may have an agglomerative effect, since its influence is not limited to single enterprises, it is equally true that many factors tending toward industrial concentration have nothing to do with the problem of location, as is evident from a consideration of the causes of large scale production and of the related problems of vertical combination. In the interests of the theory of location such distinctions should be clearly made. At the same time, it must be recognized that agglomeration can in itself become a locational factor, in so far as it creates advantages of personal contact between the technical and business personnel of different enterprises and industries.

More difficult is the question as to how the new theory of location, which up to a certain point applies equally to agriculture, industry

and trade, fits into general economic theory. Thünen had no doubts upon the subject; he started with the theory of prices and attempted to determine the importance of spatial distances to any price theory. It was not clearly perceived that industrial location could be considered from the same standpoint; nor is it generally realized today that the theory of location is essentially a problem of local differences in price formation. In the last analysis, however, the theory of location is an organic part of the general price theory, and as such has some application to all the different branches of economics, especially to those in which spatial separation and local differences are of importance. Thus it has a bearing on the theory of the distribution of the means of production and intrenches in ways not always clearly recognized on all problems of industrial expansion and contraction. It has made it possible to differentiate new forms of rent, and it is basic to the theory of transportation; it adds fulness to the general theory of division of labor, imparting a scientific character to discussions of international division of labor, so that it has even been termed the core of the theory of world economy.

Finally, the theory of location is related to the doctrine of stages of economic evolution, as Maunier pointed out in 1908 and as Ritschl has shown more recently. In so far as that doctrine is a theory of marketing it is of fundamental importance for the problem of location. Where there is no market, as in Bücher's self-sufficient natural economy, neither the price problem nor the problem of location exists. The latter arose only in the town economy with the origin of the market, but was unimportant because the town market was narrow. The transition to a national market was accompanied by a struggle between cities and new nation states which revolved in large part about questions of industrial location. A previously unknown process of relocation, which began with the shift of handicrafts to rural localities and the concentration of some industries in certain areas, gained in scope and intensity with the advent of steam. It was repeated on a larger scale with the development of world economy, when shifts in location became international in character. Through his theory of the unsuitability of the tropics for industrial production List was the first to endeavor to give content to the accepted notion that industries migrated to the locations which were most advantageous

for each country as well as for humanity in general. But only with the formulation of the theory of location has a more profound and correct idea of the process of international division of labor come to prevail. Not industrial specialization but, in Weber's words, "the uniform distribution of production over the area" is now looked upon as normal and basic for the world economy as well as for the national economies. Agricultural production, which today is spread over the world in wide rings, to follow Thünen's figure, gives rise in the first place to an industry oriented toward agriculture. Such industry at first does little but the primary processing of raw materials, and only gradually undertakes also their manufacture. As a rule governmental needs, especially military requirements, have provided the initial impetus toward higher industrial development. With the rise of the world market the tendencies which dominated the growth of the national market are reproduced on an international scale. Industry is once more deflected to backward regions and local concentration effects a reduction in the number of industrial locations. A national economy, however, is better able to defend itself against the encroachment of wider markets than was the town economy. It freely employs the weapon of railroad rates, but utilizes as its chief instrument the tariff, which is directed at the equalization of foreign locational advantages. The growth of the world market is therefore a slower process than was the transition to a national market. As the earlier process it involves nullification or mitigation of the economic effects of local differences. For a time England was "the workshop of the world," but at present an "international decentralization" is in progress, assisted in large part by the increasing substitution for coal of fuels which are much easier to transport. The process, however, is still far from complete; the problems of the international location of industry are likely to dominate the economic development of all nations for a long time to come.

HERMANN SCHUMACHER

See: ORGANIZATION, ECONOMIC; INDUSTRIAL REVOLUTION; FACTORY SYSTEM; MARKET; MARKETING; TRANSPORTATION; POWER, INDUSTRIAL; TECHNOLOGY; URBANIZATION; METROPOLITAN AREAS; REGIONALISM; CLIMATE; GEOGRAPHY; RAW MATERIALS; NATURAL RESOURCES; LABOR; COST; OVERHEAD COSTS; LARGE SCALE PRODUCTION; SPECIALIZATION; STANDARDIZATION; RATIONALIZATION; NATIONAL ECONOMIC PLANNING.

Consult: Thünen, J. H. von, *Der isolierte Staat in*

Beziehung auf Landwirtschaft und Nationalökonomie (2nd ed. Jena 1921); Weber, Alfred, *Reine Theorie des Standorts* (Tübingen 1909), tr. by C. J. Friedrich as *Alfred Weber's Theory of the Location of Industries* (Chicago 1929), "Die Standortslehre und die Handelspolitik" in *Archiv für Sozialwissenschaft und Sozialpolitik*, vol. xxxii (1911) 667-88, and "Industrielle Standortslehre" in *Grundriss der Sozialökonomik*, vol. vi (2nd ed. Tübingen 1923) p. 58-86; Series of studies of location of specific industries, *Über den Standort der Industrien*, ed. by Alfred Weber, vol. i-viii (Tübingen 1909-22); Sombart, W., "Einige Anmerkungen zur Lehre vom Standort der Industrien," and Bortkiewicz, L., "Eine geometrische Fundierung der Lehre vom Standort der Industrien" in *Archiv für Sozialwissenschaft*, vol. xxx (1910) 748-58, 759-85; Hall, Frederick S., "The Localization of Industries" in United States, Census Office, 12th Census, 1900, *Report*, vol. vii, pt. i (1902) p. cxc-cxxvii; Keir, Malcolm, "Localization and Decentralization of Industry" in his *Manufacturing* (New York 1928) ch. vi; McCallum, E. D., "The Location of the Industry" in his *The Iron and Steel Industry in the United States* (London 1931) p. 34-57; Maunier, René, *La localisation des industries urbaines* (Paris 1909); Sombart, W., *Der moderne Kapitalismus*, 3 vols. (Munich 1921-27), especially vol. ii, pt. ii, chs. xlvii, liv; Schumacher, H., "Die Wanderungen der Grossindustrie in Deutschland und in den Vereinigten Staaten" in his *Weltwirtschaftliche Studien* (Leipzig 1911) p. 401-29; Engländer, O., *Theorie des Güterverkehrs und der Frachtsätze* (Jena 1924) pt. i, and "Kritisches und Positives zu einer allgemeinen reinen Lehre vom Standort" in *Zeitschrift für Volkswirtschaft und Sozialpolitik*, n.s., vol. v (1925-27) 435-505; Predöhl, Andreas, "Das Standortsproblem in der Wirtschaftstheorie" in *Weltwirtschaftliche Archiv, Abhandlungen*, vol. xxi (1925) 294-321; Ritschl, Hans, "Reine und historische Dynamik des Standortes der Erzeugungszweige" in *Schmollers Jahrbuch*, vol. li (1927) 813-70; Salin, Edgar, "Standortsverschiebungen der deutschen Wirtschaft" in Harms, B., *Strukturwandlungen der deutschen Volkswirtschaft*, 2 vols. (Berlin 1928) vol. i, p. 75-106; Creutzburg, W., *Das Lokalisations-Phänomen der Industrien, am Beispiel des nordwestlichen Thüringer Waldes* (Stuttgart 1925); Bellemo, P., *I fattori geografici nella localizzazione delle industrie*, Università Cattolica Sacro Cuore, Pubblicazioni, 5th ser., Scienze storiche, vol. vii (Milan 1925); Predöhl, A., "The Theory of Location in Its Relation to General Economics" in *Journal of Political Economy*, vol. xxxvi (1928) 371-90; Krzyzanowski, W., "Review of the Literature of the Location of Industries" in *Journal of Political Economy*, vol. xxxv (1927) 278-91.

LOCKE, CHARLES STEWART (1849-1923), English social worker. In 1875, six years after the founding of the Charity Organization Society of London, Loch became its secretary, and during some forty years of tenure he was the chief exponent and interpreter of the charity organization movement. He was indefatigable as lecturer, writer and organizer. Although his activities were restricted to England, his writings brought him international recognition. His in-

fluence was particularly strong in the United States, where the pattern of urban life proved highly favorable for the expansion of the movement. Spiritual heir of Thomas Chalmers, Edward Denison and Octavia Hill, Loch championed the theory of social case work and the need for coordinating all community agencies, public and private, in the treatment of the poor. Like others of his school of thought he attributed much of the "pauperization" of the poor to the evils of the English poor law system and became an ardent opponent of governmental relief schemes. He was therefore chary of social insurance as favoring mass rather than individual treatment and as leading to the deterioration of the moral fiber of the poor. His influence may be seen in the militant opposition of the Charity Organization Society of London to the unemployment insurance system as it developed in the years following the World War; it can be seen also in the opposition of many social workers in the United States in the period before and immediately after the war to mothers' pensions and in the specious use of the concept of "doles" by opponents of public relief in the United States.

While his devotion to social case work was the central interest in his life, Loch was active in promoting larger measures of public welfare. He introduced hospital social service in England, was responsible for the appointment of the royal commission on the care of the feeble-minded, was interested in housing reforms and labored assiduously as a member of the Poor Law Commission of 1905 to 1909. In 1915 he was knighted for his services.

PHILIP KLEIN

Important works: *Charity Organization* (London 1892); *Charity and Social Life* (London 1910); *A Great Ideal and Its Champion: Papers by Charles Stewart Loch* (London 1923).

Consult: Richmond, Mary E., *The Long View* (New York 1930) p. 557-73; Bosanquet, Helen Dendy, *Social Work in London* (London 1914).

LOCKE, JOHN (1632-1704), English philosopher. Locke's training and practise in medicine and his constant employment in public affairs together with a naturally matter of fact bent of mind encouraged him to remain in all his inquiries primarily a conscientious and close observer of the facts, a characteristic which preeminently fitted him to be the founder of the school of British empiricism. He had little learning but "raised common-sense to the point at which it becomes luminous." He marked an

epoch in modern philosophy by undertaking the first really critical inquiry into the competence and range of the intellectual powers of man (*Essay concerning Human Understanding*, London 1690; reprinted Cambridge, Mass. 1931). His method was psychological in the sense that he relied entirely on looking into his own mind to determine both the nature and structure of its experience. But he did not use his own method rigorously or press his resulting doctrines to their logical conclusion. He sought to vindicate the achievements of modern science by teaching that all knowledge comes from experience, i.e. that it is derived from the senses, rejecting equally the scholastic doctrine that the first principles of knowledge rest upon authority and the Cartesian view that they are innate. But while all knowledge is derived from the same source, he maintained that our knowledge of physical nature falls short, in respect of certainty, of our apprehension of mathematics and of morals. This is due to a limitation of the human intellect which can never be transcended; but our powers are as great as is necessary for us to secure our happiness, beyond which we have no concern. This theory that knowledge is wholly derived from sense perception has commonly been held to issue inevitably in the skepticism of Hume; but because of his statement of the problem Locke has received credit also as the great forerunner of Kant and the "critical philosophy."

In his political writings also (*Two Treatises concerning Government*, London 1690; reprinted 1924) Locke's inquiry following his empirical method was governed by an urgent awareness of the facts and showed outstanding judgment and common sense rather than logical system. His second *Treatise of Civil Government* was admittedly a philosophical defense of the principles of the Revolution of 1688; and not only his doctrine but many of his phrases found their place in the American Declaration of Independence. First and last he was a defender of individual liberty whether against pope or king, against religious persecution (*Epistola de tolerantia*, tr. by W. Popple, London 1689, 2nd rev. ed. 1690; followed by two additional *Letters concerning Toleration*, 1690 and 1692) or literary censorship. It was from this point of view that he maintained that sovereignty resides in the will of the people and that governments are simply trustees for those ends to secure which men had in the past actually contracted themselves into society. When the government fails as trustee its removal by the people is not rebellion or the

dissolution of the state, as Hobbes had maintained, but the legitimate exercise of the power of the sovereign. In his advocacy of popular sovereignty he showed neither the rigorous logic nor the unpractical extravagance of Rousseau; but he discerned the essential principles of the political advance actually achieved in his time and drove them home in terms which have to a remarkable extent fixed once for all the language of English democratic theory. His celebrated doctrine that the right of property ultimately depends upon labor alone had some influence on Adam Smith and subsequent economists and is still an operative force in determining the course of judicial review of the regulation of business in the United States.

As is seen from his *Journal* Locke was always an acute observer of economic facts. His main theoretic writings in this field are about currency, and with Newton he was called into counsel before the reform of the English currency in 1695. He displayed effectively the fallacy in the device of depreciating the currency and taught unequivocally that silver and gold are simply commodities not differing intrinsically from other commodities. He showed that the rate of interest cannot be fixed by law, although with characteristic inconsistency he favored the fixing of an upper limit above the current rate. He saw that it was not possible to stabilize the relative value of gold and silver and was himself a silver monometallist. He did not see, however, the fallacy in the view that the prosperity of a country is dependent on a favorable balance of trade, being so far a mercantilist as to hold that national wealth depends upon the holding of gold and silver. Still it would be difficult to find any previous or contemporary writer who was as important in the development of economic science as Locke. In fiscal science he is noteworthy chiefly for having originated the doctrine that all taxes finally rest on the land.

Locke was a severe critic of current methods of education in almost every particular (*Some Thoughts concerning Education*, London 1693; reprinted Cambridge, Eng. 1922). He regarded virtuous habits, practical wisdom and "good breeding," in that order, as the chief aims of sound education; last in importance came the inculcation of knowledge. In place of the customary concentration on Latin and Greek he advocated, perhaps overoptimistically, a somewhat exacting program covering the whole field of human knowledge as well as considerable training in athletics and practise in a manual trade.

All learning by rote he rejected; right reasoning he held to be best acquired by studying good models and by the pursuit of mathematics. He condemned the exploitation of the motive of fear in inducing the young to study and felt that appeal should be made rather to the pupil's natural desire of employment and learning and his propensity to imitation. Thus it is not surprising that Locke was an uncompromising critic of the schools and advocated private tuition.

C. R. MORRIS

Works: Complete Works, 10 vols. (London 1823).

Consult: Alexander, Samuel, *Locke* (London 1908); Fowler, Thomas, *Locke* (London 1880); Fraser, A. C., *Locke* (Edinburgh 1890); Gibson, James, *Locke's Theory of Knowledge and Its Historical Relations* (Cambridge, Eng. 1917); Lamprecht, S. P., *The Moral and Political Philosophy of John Locke* (New York 1918); Green, T. H., *Lectures on the Principles of Political Obligations*, ed. by Bernard Bosanquet (London 1895) p. 68-79; Vaughan, C. E., *Studies in the History of Political Philosophy before and after Rousseau*, ed. by A. G. Little, University of Manchester, Publications, nos. clxvi-clxvii, 2 vols. (Manchester 1925) vol. i, ch. iv; Pollock, Frederick, "Locke's Theory of the State" in his *Essays in the Law* (London 1922) ch. iii; Laski, H. J., *Political Thought in England from Locke to Bentham* (London 1920) ch. ii; Driver, C. H., "John Locke" in *Social and Political Ideas of Some English Thinkers of the Augustan Age, A.D. 1650-1750*, ed. by F. J. C. Hearnshaw (London 1928) ch. iv; Larkin, Paschal, *Property in the Eighteenth Century, with Special Reference to England and Locke* (Dublin 1930); Hamilton, Walton H., "Property—According to Locke" in *Yale Law Journal*, vol. xli (1931-32) 864-80; Bonar, J., *Philosophy and Political Economy* (3rd ed. London 1922) bk. ii, ch. v; Emrich, Ignaz, *Die geldtheoretischen und geldpolitischen Anschauungen John Lockes* (Munich 1927); Seligman, E. R. A., *The Shifting and Incidence of Taxation* (5th ed. New York 1926) bk. i, chs. v-vi; McCallister, W. J., *The Growth of Freedom in Education* (London 1931) ch. x; Hefelbower, S. G., *The Relation of John Locke to English Deism* (Chicago 1918); Seaton, A. A., *The Theory of Toleration under the Later Stuarts*, Cambridge Historical Essays, no. xix (Cambridge, Eng. 1911) ch. iv.

LOCKOUT. *See* STRIKES AND LOCKOUTS.

LOCKWOOD, BELVA ANN BENNETT (1830-1917), American lawyer and reformer. Widowed at the age of twenty-three and with a child to support, she entered college in a period when higher education was rare among women, taught school for several years and then took up the study of law. In 1873 she was admitted to the bar in Washington, D. C. Refused the right to practise before the Supreme Court of the United States, she drafted and secured the passage in 1879 of a law opening that court to women and

was herself the first woman lawyer to be admitted under its terms. She was also responsible for the law giving women employees of the government equal pay with men for the same work. In 1884 and again in 1888 she was the candidate of the Equal Rights Party for president of the United States. Among the other movements in which she was actively interested were peace, temperance and woman suffrage. She was a delegate of the Universal Peace Union to the various international peace congresses held in Paris, London and Rome, and in 1896 she was commissioned by the secretary of state to represent the United States at the Geneva Congress of Charities and Corrections. She was for several years interested in the territorial encroachment claims of the Cherokee Indians and as attorney for them was largely responsible for obtaining a judgment of \$5,000,000 against the government.

In addition to her reputation as a pioneer woman lawyer and suffragist Mrs. Lockwood was widely renowned as a lecturer. She was the author of numerous brochures on arbitration, disarmament and women's rights.

LAURA M. BERRIEN

Consult: Willard, F. E., and Livermore, M. A., *American Women*, 2 vols. (New York 1897) vol. ii, p. 468-70.

LODGING HOUSES are generally defined as institutions for the provision at low rates of temporary shelter for casual or transient workers. In England and in some parts of the United States, however, the term lodging house is also applied to rooming houses catering to low paid but regularly employed workers, who having migrated from the country to the large commercial and industrial centers have become detached from the family group.

The origin of the lodging house in the narrower sense of the term dates from the beginning of large scale labor transiency. Prior to the industrial revolution there were movements of "homeless" wandering workers to centers of trade and navigation; and in periods of war and famine transiency naturally increased. With the industrial revolution, however, attended as it was by growth of urbanization and concentration of industrial activity, the existing boarding and rooming houses which had provided shelter for the detached non-transient worker were unable to meet the increasing demands of migratory and seasonal workers for a cheap night's lodging. The onrush of industrialization created a serious housing shortage for all workers, which was inadequately solved in the case of families by the

construction of tenement dwellings; the appearance of floating unskilled or unemployed laboring groups was part of the same process and contributed a special problem of housing.

Like the lodging house, the boarding house, rooming house, "flop" house and "bunk" house serve for the worker without a family as a substitute for the home. The boarding house, perhaps the generic antecedent of all types, is most generally found in districts where the demand does not justify the lodging house. Boarding houses are of two kinds: the first is the large company type and the second the small, intimate home type. Houses of the former type are more usual in localities where rapid development of business activity attracts numbers of transient laborers. They may cater to sailors, to factory workers or to certain national or racial groups. As urbanization of such districts sets in, this kind of boarding house yields its food service to the restaurant and its shelter service to the lodging house. In England a peculiar feature of the company boarding house was the custom known as living in which prevailed until the early part of the present century; owners of commercial or industrial enterprises provided for their employees living quarters in which residence was usually compulsory. This was one of the few forms of company house in which women resided. The abuses to which it gave rise with respect to conditions of employment, freedom of movement and provision of decent accommodation led to its extinction. The second type, or home boarding house, serves both male and female workers who are of a higher social and economic class and whose occupations are usually more regular and more skilled than those of the first group. With its common dining room, its common parlor and its landlady this institution is better adapted to the quiet residential community. Urbanization also tends to eliminate this species of boarding house.

The rooming house, which frequently permits light housekeeping, usually caters to the same social and economic class as does the home boarding house. While the latter supplies in many respects a home environment, the rooming house because of its lack of social life is often conducive to vice.

A flop house is a lodging house of the dormitory type but with much lower prices than other lodging places. The better grade of flop house provides bed and bedding; there is a lower grade which provides only the bare bunks or chairs, and the lowest permits men for a pittance to sleep on the floor. In some European and Asiatic cities

it is possible to engage sleeping space with or without bedding.

The bunk house is a combination lodging and boarding establishment, sometimes supplemented by a commissary department, which serves transient homeless workers in places remote from the urban center. It is found on railroad or construction jobs, in lumbering or mining camps or on large plantations. Here the men may live in tents, barracks, box cars or, as in the diamond fields of South Africa, in large closed compounds. The food and lodging service may be managed by the employing company or may be contracted for by commissary and boarding companies. The commercial boarding house tends to replace the bunk house wherever the population increases sufficiently to make it profitable.

A type of public shelter extensively used in Europe is the farm colony, which was created with the double purpose of ridding the cities of unemployable and vagrant persons and of providing labor for land cultivation. It may be a place for either enforced detention or voluntary commitment; in seasons of unemployment it serves as a lodging house for the homeless unemployed. An auxiliary to the municipal lodging house, it has sometimes lapsed from its original function of rehabilitation into a means of caring for the pauper class which overburdens the city asylums. The most successful European farm colonies are found in Germany, although they have been established in other countries, notably France, Belgium, Switzerland and the Soviet Union. In the United States private agencies have made unsuccessful attempts to maintain such colonies.

In the evolution of lodging houses proper two general classes have developed. The earliest of these, still most numerous, is the commercial lodging house. The second class includes lodging houses operated by public and private charity, either free or at cost, but all organized for social purposes. The latter are usually maintained in an attempt to overcome the deficiencies of commercial lodging houses. Laws and regulations imposed on the commercial houses apply, however, with equal force to the charitable lodges. By legal definitions or court decisions lodging houses have been distinguished from hotels, sometimes on the basis of the fees charged but usually on grounds of internal structure. A lodging house may be a dormitory, but more often the beds are separated by dwarfed partitions which do not reach the ceiling, thus forming

tiny rooms known in the United States and in England as cubicles and in France as *chambrettes*. Other characteristics of the lodging house are the segregation of the sexes and the preponderance of men; in Europe there are occasional lodging houses which shelter migrant families. While as a general rule meals are not served, lodging houses in some countries do provide communal kitchens where occupants are permitted to do their own cooking. A further feature which distinguishes the lodging house from the hotel and which has grown out of its function as a cheap and temporary form of accommodation is its right to refuse shelter to undesirable applicants.

The commercial lodging houses which sprang up in all industrial countries in the first half of the nineteenth century gave rise to the abuses which usually occur when the care of socially dependent groups is left to private initiative. Not only were the accommodations inadequate and even injurious to the health of the patrons, but vice and crime were often encouraged and saloons and gambling halls established. Moreover these houses were often exploited by corrupt politicians who used them to establish fictitious residences for "floaters." Concurrently with the commercial undertakings charitable and semicharitable lodging houses were initiated by various religious and evangelistic organizations. Some of these early agencies still exist; the Seamen's Church Institute of New York founded in 1843 has recently added an extensive social program to its original activities, and various small shelters are maintained by evangelistic missions in every large city. Later private charitable shelters were established by social welfare agencies which aimed to provide an opportunity for men to escape the demoralizing influences of the commercial lodging houses or to threaten these houses with competition in order to force them to raise their standards of accommodation. Some of the later houses, like that established in New York City in 1885 by the Sanitary Aid Society or the New York Wayfarers' Lodge, which opened in 1893, were model demonstrations designed to interest the municipality in establishing a public lodging house. The outstanding examples of the modern socio-religious lodge are those of the Salvation Army, which since about 1890 has established shelters at cost fees in most large cities of the world. The most prominent and the earliest lodging houses for men established on a non-religious basis are the Rowton houses in England founded in 1892. Similar institutions are the three Mills hotels in New York City and

the Rufus F. Dawes Hotel in Chicago. These constitute a hotel type of lodge operated on a non-profit basis. A sufficient charge is made to insure maintenance and in some cases to provide a small surplus for further development.

At present there are municipal lodging houses in most cities of the world. One of the earliest and most extensive was established at Berlin in 1887. The refuge at Paris was founded in 1889, that at London in 1893 and the Municipal Lodging House of New York City in 1896. In every case these large public lodging houses were preceded by considerable effort of an experimental nature on the part of privately endowed agencies. In the United States the major objective of these agencies was to persuade the municipalities to establish public shelters and to discontinue the practise of lodging homeless persons in police stations and county jails.

Lodging house patrons are drawn chiefly from the older age groups of the community; the median age varies from forty to fifty years. As a class the group rarely rises above the minimum subsistence level. It is usually the first to be affected by unemployment and the last to be relieved by a lively labor market. Because of the element of selection the number of people sheltered in lodging houses cannot be considered an accurate index of unemployment, but it does indicate the effect of depression on the lowest paid working group.

The patronage of the lodging house is, however, by no means restricted to the casual or migrant labor groups, and it is in connection with its mixed character that problems of social control arise. It includes every manner of derelict not found in public or private institutions—criminal, pauper, beggar, prostitute and mental defective—and the opportunities for the breeding of crime and the formation of vagrant habits are plentiful. The regulation of lodging houses by public authorities, which began in England in 1851 and was followed in other countries toward the end of the century, aimed mainly at control of the behavior of lodgers; in fact lodging houses were often put under the surveillance of the police. But the later activity of social and religious agencies in providing decent temporary shelter gave rise to a new form of control—the regulation of sanitary conditions in lodging houses. It has therefore become the practise to entrust departments of health or welfare with the supervision of lodging houses; thus the lodging house population in the best regulated cities has come to be a quasi-institutionalized class.

Sanitary regulations consist chiefly of minimum requirements for light, air space, ventilation and safety from fire. Although such laws exist in practically every state and city, requirements are not easily enforced; even honest officials find it difficult to enforce regulations concerning the conduct rather than the construction of the house.

NELS ANDERSON

See: CASUAL LABOR; MIGRATORY LABOR; SEAMEN; LONGSHOREMEN; UNEMPLOYMENT; VAGRANCY; HOUSING; HOTELS.

Consult: London, County Council, Report by the Medical Officer of Health, *Common Lodging Houses and Kindred Institutions* (London 1927); Chesterton, Ada E., *In Darkest London* (London 1926); "Die Wandererfürsorge im Rahmen der sozialpolitischen Massnahmen des letzten Jahrzehnts" in *Innere Mission*, for 1929; "Fürsorge für Obdachlose" in *Berliner Wohlfahrtsblatt*, vol. v (1929) 65-80; Farrant, Richard, "Lord Rowton and Rowton Houses" in *Cornhill Magazine*, n.s., vol. xvi (1904) 835-44; Bradwin, E. W., *The Bunkhouse Men* (New York 1928); Kettleborough, Charles, "Inspection of Hotels and Public Lodging Houses" in *American Political Science Review*, vol. vii (1913) 93-96; Wolfe, A. B., *The Lodging House Problem in Boston* (Boston 1906); Fretz, F. K., *The Furnished Room Problem in Philadelphia* (Philadelphia 1912); Solenberger, A. W., *One Thousand Homeless Men* (New York 1911); Anderson, Nels, *The Hobo* (Chicago 1923); Zorbaugh, H. W., *The Gold Coast and the Slum* (Chicago 1929); Office Central des Oeuvres de Bienfaisance, Paris, *Charitable, Bienfaisant et Social* (Paris 1926); Joffroy, A., and Dupouy, R., *Fugues et vagabondage* (Paris 1909); Calcutta Improvement Trust, *Report on the Condition, Improvement and Town Planning of the City of Calcutta* by E. P. Richards, 2 vols. (Calcutta 1914); Buell, R. L., *The Native Problem in Africa*, 2 vols. (New York 1928) vol. i, ch. iii; Gamble, S. D., *Peking: a Social Survey* (New York 1921); Mavor, James, *An Economic History of Russia*, 2 vols. (2nd ed. London 1925) vol. ii, 397-406.

LOEWENSTEIN, ALFRED (1877-1928), Belgian financier. The son of a Brussels stockbroker, Loewenstein engaged in financial affairs from an early age. About 1905 he became connected with the Pearson-Farquar group, which was engaged in the development of electrical industries, especially in South America. He led in introducing into Belgium such securities as Rio de Janeiro Tramway Light and Power, Brazilian Traction Light and Power and Barcelona Traction Light and Power, legally Canadian corporations. All of them became objects of large scale speculation on European exchanges. These operations laid the basis of his very large personal fortune. After the World War Loewenstein extended the field of his activity, apparently envisaging a great international electrical

trust; in 1923 he organized the Société Internationale d'Énergie Hydro-Électrique, a holding company principally for "Canadian" securities. The Sofina benefited from his subsequent dismissal. In 1926 he created the Hydro-Electric Securities Corporation, a holding body for North and South American electrical stock incorporated in Montreal. He was interested also in the artificial silk industry and tried to secure control of British Celanese, Ltd.; he created the International Holding and Investment Company with important interests in several large European companies. He organized other minor holding companies and in 1928 he tried unsuccessfully to secure control of the Banque de Bruxelles.

Although Loewenstein's contribution to the European popularity of its securities aided in developing South America, his celebrity was not based on the social value of his work but on the immensity of his fortune, his extraordinary ostentation and his flair for publicity. Exclusively a financier, he regarded the industrial and productive aspects of business as objects of financial combinations and stock manipulation. His activity helped to aggravate economic instability and irregularity, while his extravagance aided in discrediting capitalists and the capitalist regime. He died by falling from an airplane into the North Sea.

B. S. CHLEPNER

Consult: Hickok, Guy, "Alfred Loewenstein—the Man Who Could Not Stop" in *Bankers Magazine*, vol. cxvii (1928) 357-61.

LOGIC. The conditions under which logical theory originated are indicated by the two words still generally used to designate its subject matter—logic and dialectic. Both of these words have to do with speech, not of course with speech in the form of mere words but with language as the storehouse of the ideas and beliefs which form the culture of a people. Greek life was peculiarly characterized by the importance attached to discussion. Debate and discussion were marked by freedom from restrictions imposed by priestly power and were emphasized with the growth of democratic political institutions. In the Homeric poems the man skilled in words which were fit for counsel stands side by side with the man skilled in martial deeds. In Athens not merely political but legal issues were settled in the public forum. Political advancement and civic honor depended more upon the power of persuasion than upon military achievement. As general intellectual curiosity developed

among the learned men, power to interpret and explain was connected with the ability to set forth a consecutive story. To give an account of something, a *logos*, was also to account for it. The *logos*, the ordered account, was the reason and the measure of the things set forth. Here was the background out of which developed a formulated theory of logic as the structure of knowledge and truth.

Of itself, however, it was only a background. Definite formulation of theory was the product of fermentation introduced by the philosophers. In the sixth and fifth centuries B.C. the Greek world of the Mediterranean basin was the scene of travel, commerce and social intercourse. The result was the development among the intellectual class of a kind of cosmopolitanism. Scholars, called wise men (*sophists*), subjected the various arts—military, civic and industrial—to analysis and report. In consequence these arts, which formerly had a local meaning and scope, resting upon the tradition and customs of a particular community, were given a theoretical treatment. They were lifted out of their special environments and subjected to rationalization. The period was characterized by the preparation of an enormous number of dissertations covering all the arts. Traveling scholars as they went about offered to teach the arts by methods which rendered slow practical apprenticeship unnecessary. Finally, some of the more ambitious of these men offered their services to the young men of Athens, claiming that they could teach the “virtues”—an English word which gives only an awkward rendering of the Greek term, since the latter denotes skilled excellence in the arts, especially the political arts, combined with that power to command the attention of others which would assure civic preeminence. For those going into political life this promise involved training in ability to speak in private groups and in the public forum and formed the beginnings of a kind of practical logic.

Under the merciless attacks of Plato the name sophist took on an invidious meaning. He claimed that the method of the sophists was one of sham; that it was the art of appearing wise, not of being so. It aimed not at truth but at persuasion by whatever specious arguments would silence an opponent. Plato insisted therefore that the method of the sophists was one of contention, aiming at victory over others and hence assuming ultimate division in the structure of the mind. A true method, on the other hand, is a cooperative search, assuming an objective unity beneath all

divisions of opinion and belief and terminating in the production of a common understanding sustained by grasp of the one relevant objective truth. Hence Plato called his method dialectic, a term obviously derived from the dialogue of those engaged in the exchange of ideas.

Part of the logical work of Plato consisted in pointing out some of the tricks by which the sophists made “the worse appear the better reason.” This material was formulated by his successor Aristotle and remains today in logical treatises under the caption of fallacies. His positive contribution was his theory of the universal, the principle underlying the differences of different instances. Aristotle thus gives the Platonic Socrates credit for the discovery of induction and definition. Induction (better termed education) was the process by which the universal was extracted from a number of varying cases, definition the process by which this principle was fixed for use in all subsequent thinking. In Plato’s system this universal constituted the “essence” or true and ultimate reality of the things in question. Aristotle criticized the resulting isolation of the universal from particular things. This isolation agreed both with Plato’s mathematical interests and with his desire to obtain a method for social reform, since the separate universal provided an ideal reality which could be placed in contrast with existing things.

Aristotle was above all a naturalist. He asserted that the universal is united with particular existences, binding them together into a permanent whole (the species) and keeping within definite and fixed limits the changes which occur in each particular existence. The species is the true whole of which the particular individuals are the parts, and the essence is the characteristic form. Species fall within a graded order of genera as particular individuals fall within the species. Thinking is the correlate of these relations in nature. It unites and differentiates in judgment as species are united and separated in reality. Valid knowledge or demonstration necessarily takes the form of the syllogism because the syllogism merely expresses the system in which, by means of an intervening essence, individuals are included in species. Definition is the grasp of the essence which marks one species off from another. Classification and division are counterparts of the intrinsic order of nature.

Thus the logical theory which furnished the intellectual method of Europe for almost two thousand years was formulated when the appliances of observation and experimentation

upon which modern scientific inquiry and testing depend were lacking. Moreover the only mathematics available was geometry, upon the model of which Alexandrian scientists constructed the astronomical frame. The traditional logic was a logic for clarifying and organizing that which was already known or that which was supposed to be known and hence currently believed. For putting this material in rational form, placing upon it the stamp of rational authenticity, logic was an unrivaled instrument. But it could not furnish means for breaking through the limits of the intellectual content of current culture so as to make discoveries in new fields. The ultimate premises, or validating principles (beginnings), of all knowledge were assumed to be already in the possession of the mind. Sense perception supplied the demonstrative material on the side of the particulars, and rational perception of self-evident truths, or axioms, performed the same office on the side of universals. Human learning, or discovery, was limited to putting these two given things together.

In its own intention the Aristotelian logic was a logic of truth. It set forth the structure of valid knowledge, which corresponded in turn to the systematic structure of reality. But when after the decline of interest in nature ancient culture became introspective and retrospective, logic declined more and more to a mere formal instrumentality of exposition and communication. The ethical schools, skeptic, Epicurean and stoic, either deprecated the study of logic as of no importance (or even harmful in distracting attention from the supreme business of the conduct of life) or else reduced it to a mere device for avoiding error in moral judgments. Higher learning, as in the universities of Athens and Alexandria, devoted itself to organizing and interpreting the literatures of the classic past and put logic on a level with rhetoric as a formal aid in this task.

The administrative genius of Rome had little use for inquiry and reflection for their own sakes. It was interested in the method of thought as far as it could be used as a tool of political life. At first this was in form largely subordinate to rhetoric in the guidance of oratory when, as in the time of Cicero, oratory played a crucial part in civic rivalries. During the empire logic was the instrument for organizing the complex legal body of rules and decisions under fixed general principles, derived if possible from the "law of nature." Logic thus became definitely a formal discipline useful in arranging material for pur-

poses of argument, exposition and instruction.

The Christian church took over this conception of logic and employed it as an agency for similar purposes of attack and defense, especially the defense of doctrine against pagan without and heretic within. During the great scholastic period of the twelfth and thirteenth centuries there was, however, a striking revival in the scope and vitality of formal logic. The writings of Aristotle came to Christendom through the Arabs. Intellectual activity was stimulated to undertake a comprehensive organic survey and formulation of Christian doctrine, with a view to showing its intrinsic harmony with reason even when the material of revelation was above reason. The relatively scanty axioms and first principles of Aristotle were expanded to include the authoritative truths of the Scriptures, fathers, church councils and popes. An extraordinarily stringent method of demonstrative exposition was built up in which all possible objections were considered and refuted in syllogistic fashion until the authorized body of doctrine was intellectually organized into a system.

The universities, which were the centers of intellectual life, played their part. Great teachers met all comers in intellectual tournaments. Teaching was influenced by the method of doctrinal discussion while it also contributed to the perfecting of the latter method. The constructive intellectual movement which gave meaning and point to the development of formal logic degenerated after the work of unifying Christian dogma and rationalizing its structure had effected its purpose. There followed that period of hair splitting and refining which tended for a long time to throw the term scholastic into disrepute. What was even more important, the center of intellectual gravity was shifting. Secular and humane interests were taking the place of ecclesiastical and theological concerns. Satisfaction of the new interests directed man toward nature and new intellectual methods were demanded. The cry went up that the old logic was one of words only and that what was required was a logic which would enable men to cope with things. New physical instruments and materials were invented or were introduced from the Orient. Travel and exploration extended the scope of intellectual data. The demand arose for a logic of discovery and new inquiry. Literary persons joined with reformers of society and of science in ridiculing the pretensions of syllogistic logic. Mathematical concepts, in conjunction with the apparatus of the newly developing tech-

nology, replaced the ideas of essences, genera and species as central in the constitution of nature.

The full history of the revolt and of the many more or less inchoate and antagonistic attempts to formulate a new logic is practically identical with the intellectual history of the period from the seventeenth century to the present. There soon appeared a division which, while technical in outer appearance, may be said to have had an almost tragic effect upon the intellect of the western world. This was the split between those who appealed exclusively to experience in the form of sense perception as the source of valid beliefs and those who appealed to reason in the form of mathematical concepts as the ultimate authority. Ignoring refinements one may regard Francis Bacon and Descartes as the representatives of the two movements. On the whole, with some notable excursions from each side into the territory of the other, Great Britain adhered to the empirical school and the continent to the rationalistic.

The tendency of the latter school was to engage in conceptual constructions and dialectic manipulations. Aside from mathematics and the subordination of physical phenomena to mathematical formulae (a field in which it won some notable triumphs) the rationalistic school took almost complete possession of the fields of morals, jurisprudence, political theory and rational theology, theology supposedly emancipated from supernatural bonds. It was thus supreme in the entire realm of what would now be termed the social sciences. The devastating wars of the seventeenth century, civil and religious, fostered a demand for a rational and moral standard as an authority above and untouched by shifting temporal struggles. Norms were demanded which could be applied securely to empirical social and political phenomena. To this end they must proceed from the source of reason which was superior to mundane and human vicissitudes. Grotius, for example, revamped the law of nature of the mediaeval period to help rationalize international relations, and his successors in various fields of jurisprudence and morals made his method of appeal more and more stringently logical.

The tendency of the rationalistic method was optimistic and justificatory or apologetic. The underlying assumption was that empirical social phenomena, however much they might fall short of rational norms, were yet subject to their authority. Actual institutions might be criticized

in their detail as coming short of the law of reason, but their essential nature was justified as a manifestation of universal rationality. Thus Spinoza, who was anything but a political conservative in his ultimate ideal, held that the function of the state as a representative of law and therefore of reason and universality is so intimate and necessary that no conceivable abuse of authority justifies rebellion.

The religious civil wars of the seventeenth century had an opposite effect in Great Britain. They strengthened the empirical school because they created an atmosphere of moderation and compromise. The necessity for toleration was so evident that desire to carry through any comprehensive set of beliefs to its logical end was effectively dulled. The Revolution of 1688 not only established John Locke as the official intellectual apologist of popular rights (including the right and duty of rebellion) but made the empirical method developed by Locke in his *Essay on the Human Understanding* supreme in the fields of morals, politics and natural theology until the early part of the nineteenth century.

David Hume detected what was logically the weak point in Locke's empiricism by showing that it left no place for intrinsic relations and thus resulted in an intellectual atomism whose only justifiable philosophic conclusion is complete skepticism. Nevertheless, Hume appealed to habit and custom as practical if irrational unifying and relating forces. Thus he really succeeded in strengthening rather than upsetting the empirical spirit in British thought. At most he gave it a conservative turn by insisting that habit is the sole ultimate principle of unity and coherence and so prevented the critical liberalism of the school of Locke from taking a radical turn. Hume's work bore its distinctly philosophic fruit in Germany. It destroyed rationalistic complacency in the mind of Kant and started him on the way to producing a philosophy which would give sense experience the function of supplying the matter of all justifiable beliefs and practical acts, while reason would furnish its rational forms, its justifying norms and inescapable imperatives. Kant's successors in Germany all felt that Kant's reconciliation of sense and reason in logical method as well as in the practical and moral applications of the new logic was mechanical, leaving the two factors in unstable equilibrium. The movement toward their organic union culminated in what may not unfairly be called the institutional idealism of Hegel.

The technical transformations wrought by

Hegel in logical theory, with his dialectic movement of thesis, antithesis and synthesis, lie beyond the scope of this article. In substance it may be said, however, that Hegel sought a logic which would avoid the abstract, non-historical character of the earlier semimathematical rationalism. He wished in effect to make the movement of history the supreme rational manifestation. If philosophical and terminological technicalities are ignored, his work may be characterized as an attempt at a logical apotheosis of the historical method; indeed it was largely through his influence that the historical method was in the first half of the nineteenth century brought to consciousness in the fields of law, politics, morals, language, religion and political economy. Hegel piously retained the rationalistic idea of the supremacy of reason and absolute mind in history.

As far as fundamental logic was concerned, however, there was no great upset when Marx "stood Hegel on his head," as he said, and treated the ultimate logic and dialectic of history as essentially economic in character. The growing importance of evolution in biological science, with its stress on biological realism or biological materialism, was largely responsible for this rise of economic realism or materialism as an interpretation of human history. With Marx' official successors the materialistic dialectic of history was developed in an absolutistic spirit which made the complete downfall of bourgeois and capitalistic society inevitable, leading so necessarily to the social synthesis of communism as seemingly to free human action and planning from any responsibility in producing social change. The net tendency of the logic of historicism in its identification with evolutionism was to elevate an automatic movement of history to the position of supreme arbiter.

In Great Britain during the nineteenth century there was a rehabilitation of the empirical method. It is noteworthy that Mill's logic was originated by his desire to introduce scientific method into social and moral subjects. He was offended by the adherence to dogmatic authoritarian methods in this field as well as by the position, typified by Macaulay, that in morals and politics we must depend only upon precedent and individual insight, political phenomena as such being outside the scope of scientific method. According to Mill, we can rise from observations to hypotheses, develop these hypotheses deductively and then apply them to social as well as to physical material. Mill's particularistic assumptions led him, however, into an extreme individualism

which prevented realization of his scientific aim. On the other hand, the increasingly dispersive and disintegrative tendencies of social life led a group of English thinkers to rely upon the "organic" logic of the German idealistic school as the best means of combating atomistic individualism. For a generation in the latter part of the nineteenth and the early part of the twentieth century this philosophy and logic were almost dominant in English thought. Their influence coincided with the ebbing of the liberalism of the type of Locke and Mill and the growing desire for state regulation of private enterprise. Whether Hegel so intended or not, there is no doubt that the premises of his logical method are conducive to collectivistic policies in social matters.

The split in schools of method earlier referred to as characteristic of modern life continues into the present. On the whole at the present time the conceptualistic methods of the rationalist school find little favor in the social sciences. The latter are devoted largely to empirical fact finding and to the attempt to arrive at social laws "inductively." Abstinence from general ideas is accompanied, however, by remoteness of social method from guidance of social, legal and economic phenomena. The split is called tragic because it is the sign of failure to find a generally accepted method which will do in control of social forces what scientific method has accomplished in control of physical energies. We now oscillate between a normative and rationalistic logic in morals and an empirical, purely descriptive method in concrete matters of fact. Hence our supposed ultimate ideals and aims have no intrinsic connection with the factual means by which they must be realized, while factual data are piled up with no definitely recognized sense of their bearing on the formation of social policy and the direction of social conduct.

Consciousness of this situation has been a main factor in a new attempt to generalize the experimental side of natural science into a logical method which is applicable to the interpretation and treatment of social phenomena. So far this recent movement remains almost entirely American in character. It was initiated by Charles S. Peirce and carried out especially in morals and religion, under the name of pragmatism, by William James. It is characteristic of this logical school to insist upon the necessity of conceptions which go beyond the scope of past experience for guidance of observation and experiment, while it also insists that ideas are only

tentative or working hypotheses until they are modified, rejected or confirmed by the consequences produced by acting on them. Emphasis upon experiment differentiates this method from historic empiricism as well as from present fact finding methods. The latter treat social inquiry as wholly outside the facts investigated and merely survey and record data in a certain field. The *novum organum* called for by the experimental logic insists that no such separation is possible in social matters, and that ideas and principles must be employed to deal overtly and actively with "facts" if, on one side, the facts are to be significant and if, on the other, ideas and theories are to receive test and verification. Experimental logic would resolve the controversies, now four centuries old, between reason and sense experience by making both concepts and facts elements in and instruments of intelligently controlled action.

JOHN DEWEY

See: METHOD, SCIENTIFIC; SCIENCE; PHILOSOPHY; SOPHISTS; SCHOLASTICISM; PRAGMATISM; MATERIALISM; POSITIVISM.

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LOISEL, ANTOINE (1536-1617), French jurist. Loisel was a pupil of Cujas when the latter was an advocate at the Parlement of Paris; on various occasions he exercised the functions of *avocat du roi* and procuror general. Of very extensive learning, he published numerous works of history, archaeology, philology and Latin poetry. As a jurist he collaborated with Cujas in the study of Roman law and discovered important unpublished texts, the *Consultatio veteris*

jurisconsulti and the *Novellae majoriani*. But his principal work was the *Institutes coutumières*, which is the first synthesis of the customary law applied in the north of France. Until then the customs of each town and of each province had been the subject of independent monographs. Dumoulin, who first thought of unifying French law, taking as a basis the custom of Paris, failed in his attempt because it was too ambitious. Loisel, on the contrary, composed a very brief work made up of short legal rules formulated in archaic and picturesque language and assuming frequently the form of proverbs, which made them easily remembered. A great number of the rules retouched and rejuvenated have passed into the *Code Napoléon*. Loisel's intention was to compose for French customary law a work analogous to the Institutes of Justinian, a clear and convenient manual giving the essential principles and clarifying controversial points. Although the *Institutes coutumières* contain the same lacunae as the customs from which they are taken—they are very summary on the law of obligations but more complete on the law of persons, property, succession, marriage contracts and on feudal law—they may be considered the best résumé extant of French customary law. But their conciseness has obliged editors to add commentaries of unequal value. Loisel's *Pasquier, ou dialogue des avocats*, contains valuable information on the history of lawyers and the functioning of justice in ancient France.

GEORGES BOYER

Important works: *Institutes coutumières*, first published in Coquille, Guy, *L'institution au droit des français* (Paris 1607); new ed. with notes by François de Launay (Paris 1688); ed. with notes by E. J. de Laurière, 2 vols. (Paris 1710 and 1758), reedited by A. M. J. Dupin and E. R. L. de Laboulaye, 2 vols. (Paris 1846); *Pasquier*, first published in *Divers opusculs* (Paris 1652), containing biography of Loisel by his grandson Claude Joly; new ed. by A. M. J. Dupin (Paris 1844).

Consult: Demasure, A., *Antoine Loisel* (Paris 1876); Viollet, Paul, *Droit privé et sources: histoire du droit civil français* (3rd ed. Paris 1905) p. 231-36, and bibliography p. 260.

LOMBARD, PETER. See PETER LOMBARD.

LOMBROSO, CESARE (1835-1909), Italian criminologist. Lombroso, who was professor of legal medicine at the University of Turin, came into prominence by the publication of his book *L'uomo delinquente*, in which he affirmed the atavistic origin of the born criminal. He based his contention on numerous anatomical, phys-

iological and psychic stigmata found in many criminals, stigmata which he declared were not natural to mankind at present but were peculiar to primitive and savage races. He believed that a conjunction of stigmata determined the type of inborn delinquency, which revealed itself externally; he portrayed this criminal type by means of composite, or Galtonian, photographs of criminals. He successively superimposed the complementary theses of epilepsy and moral insanity, which he regarded as secondary characteristics of atavism. In his detailed classification of criminals he acknowledged that not all were born criminals, formulating such categories as "criminals of passion," under which he included political criminals imbued with excessive patriotism; "insane criminals," including alcoholics, mattoids and hysterical criminals; and "occasional criminals," the victims of environmental factors. Although, as Haeckel pointed out, Lombroso's ideas on inherited criminality would lead directly, if social Darwinian doctrine were applied, to the use of the death penalty on a grand scale as a means of freeing the human species from its malefactors by artificial selection, Lombroso held the death penalty to be the last resource in the repression of crime. He favored instead methods of readaptation of the criminals and advocated the doctrine of the symbiosis of crime, by which society would utilize the serviceable qualities and aptitudes of the malefactors. In his studies of genius Lombroso concluded on the basis of selected data that genius was related to epilepsy. In 1880 he founded the *Archivio di psichiatria, antropologia criminale, e scienze penali* to further the views of his school. Although premature, exaggerated and now largely superseded, Lombroso's ideas stimulated the study of criminal anthropology and by their positivistic approach played a decisive role in the transformation of penology and criminal law, especially when supplemented by the work of Ferri and Garofalo.

C. BERNALDO DE QUIRÓS

Important works: *L'uomo delinquente* (Turin 1876; ed. by G. Lombroso-Ferrero, 3 vols., Turin 1897-1900; abr. tr. by G. Lombroso-Ferrero, 1 vol. (New York 1911); *La donna delinquente, la prostituta e la donna normale*, in collaboration with Guglielmo Ferrero (Turin 1893, 3rd ed. by G. Lombroso-Ferrero, Milan 1915), partly tr. as *The Female Offender* (London 1895); *Il delitto politico e le rivoluzioni*, in collaboration with R. Laschi (Turin 1890); *Genio e follia* (Milan 1864; 6th ed. with title *L'uomo di genio*, Turin 1894), English translation (London 1891).

Consult: Lombroso-Ferrero, Gina, *Cesare Lombroso,*

storia della vita e delle opere narrata della figlia (Turin 1915), and "Come mio padre venne all'antropologia criminale" in *Archivio di antropologia criminale psichiatria e medicina legale*, vol. xli (1921) 419-37; Kurella, H. G., *Cesare Lombroso als Mensch und Forscher*, *Grenzfragen des Nerven- und Seelenlebens*, vol. lxxiii (Wiesbaden 1910), tr. by Eden Paul as *Cesare Lombroso, a Modern Man of Science* (London 1911); Ferri, Enrico, "Cesare Lombroso e la funzione sociale della scienza" in *Rivista italiana di sociologia*, vol. xiii (1909) 547-62; Vervaeck, L., "La théorie lombrosienne et l'évolution de l'anthropologie criminelle" in *Archives de l'anthropologie criminelle*, vol. xxv (1910) 561-83; Sellin, Thorsten, "A New Phase of Criminal Anthropology in Italy" in *American Academy of Political and Social Science, Annals*, vol. cxcv (1926) 233-46; Goring, Charles, *The English Convict* (London 1913).

LOMONOSOV, MIKHAIL VASILYEVICH (1711-65), Russian writer and scientist. The career of Lomonosov, the first Russian savant to receive a foreign training, was typical of the period of Peter the Great, when the Muscovite state was passing rapidly from feudal barbarism to the modern civilization of the west. Born in a fisherman's family in a village on the White Sea, he learned to read and write from a neighboring peasant and at the age of nineteen ran away to Moscow. There he was admitted to a monastery school, where he lived in indescribable poverty and showed an exemplary zeal in his studies. When the St. Petersburg Academy of Sciences applied to the Moscow Theological Academy for twelve good students to send abroad, Lomonosov, who was about to become a priest, was chosen as one of them. In Germany, where he spent five years, he received a thorough scientific training under the best natural philosophers of the time, including Christian Wolff. Recalled to Russia, he was appointed a member of the Academy of Sciences, which then functioned in place of a university; the rest of his life was spent in his official duties as an academician, which included, according to his own testimony, "lecturing and delivering public speeches, making new experiments, composing verses for solemn festivities, compiling rules of rhetoric for the Russian language and writing the history of my country."

Lomonosov's own inclination and genius lay in the direction of natural science, and had he been left to cultivate one branch of learning he might have made good his boast that Russia "could also give birth to a Newton." Today he is recognized as a neglected scientific genius of the first order, who in his published memoirs formulated the mechanical theory of heat, gave a corpuscular explanation of the elasticity of gases

and showed the continuity of the three states of matter. He opposed the phlogiston theory and anticipated by more than ten years Lavoisier's famous experiments on the calcination of metals. But his work in natural science remained very largely without influence on the main stream of scientific thought. Although Lomonosov was esteemed by his contemporaries as the greatest poet of the age, his verse is today unreadable. His real and effective achievement lay in his reform of the Russian language, which he transformed from an uncouth popular speech into a medium suited for cultural and educational expression. He wrote the first Russian grammar (1755), organizing it around the dialect of Moscow and in accordance with the general grammar of all languages considered in their natural evolution. The Russian orthography in use today is largely based on Lomonosov's work. In seeking to enrich the vocabulary he borrowed heavily from church Slavonic and developed a theory of three styles of discourse, in which the admixture of Slavonic varied directly with the solemnity and formality of the subject matter. This theory by impeding the secularization of style exercised to a certain extent an unfortunate influence on Russian literature. As a historian Lomonosov was by modern standards rhetorical, ultrapatriotic and uncritical. His educational influence on the formative period of Russian culture was as a whole enormous, ranking with that of Peter the Great in politics and government.

BENJAMIN GINZBURG

Works: *Sochineniya*, ed. by M. I. Sukhomlinov, vols. i-v (St. Petersburg 1891-1902).

Consult: Menshutkin, B. N., *Mikhailo Vasil'evich Lomonosov* (4th ed. St. Petersburg 1912); Imperial Academy of Sciences, St. Petersburg, *Lomonosovskii sbornik* (Symposium on Lomonosov) (St. Petersburg 1911); *M. V. Lomonosov: Sbornik statei* (Collection of essays on Lomonosov), ed. by V. V. Sipovsky (St. Petersburg 1912); Sobolevsky, A. I., *Lomonosov v istorii russkogo yazika* (Lomonosov in the history of the Russian language) (St. Petersburg 1911); Pekar-sky, P., *Istoriya Imperatorskoi Akademii Nauk* (History of the Imperial Academy of Sciences), 2 vols. (St. Petersburg 1870-73) vol. ii; Budilovich, A., *Lomonosov kak naturalist i filolog* (Lomonosov as naturalist and philologist) (St. Petersburg 1869); Mirsky, D. S., *A History of Russian Literature* (New York 1927) p. 57-62; Kropotkin, P. A., *Ideals and Realities in Russian Literature* (New York 1905) p. 23-25; Luther, Arthur, *Geschichte der russischen Literatur* (Leipzig 1924) p. 88-91. An exhaustive bibliography of works on Lomonosov in Russian and other languages is found in Fomin, A. G., and others, *Materiali po bibliografii o Lomonosove* (Materials for a bibliography on Lomonosov), Vistavka "Lomonosov i Elizavetinskoe vremya," vol. vii (Petrograd 1915).

LONGE, FRANCIS DAVY (1831-1910), English economist, barrister and civil servant. He studied at Oxford, where he became interested in John Stuart Mill's economic philosophy. He was admitted to the bar in 1858 and was appointed assistant commissioner of the Children's Employment Commission; in this capacity he was brought into contact with the practises and opinions of large employers of labor. In 1860 he published *An Inquiry into the Law of Strikes* (Cambridge, Eng.), in which he sketched the development of statute and common law as to the combinations of workers from 1350. Release from official duties enabled him to formulate his growing dissent from the current wage theory; in 1866 appeared the eighty-page tract *A Refutation of the Wage-Fund Theory of Modern Political Economy as Enunciated by Mr. Mill, M.P. and Mr. Fawcett, M.P.* (London 1866, reprinted Baltimore 1904). The essay attracted no attention and copies sent by the author to Mill and Fawcett were unacknowledged. Upon the appearance of Mill's recantation of the wage fund theory (*Fortnightly Review*, n.s., vol. v, 1869, p. 505-18, 680-700) Longe had the unsold copies of his tract bound in new covers with a new title page bearing the date 1869 and a prefatory note referring to Mill's retraction. Longe's indictment of the wage fund theory thus preceded and was entirely independent of Cliffe Leslie's criticism of 1868, Thornton's attack and Mill's recantation of 1869 and Walker's definitive assaults of 1874-75. As to doctrinal relationship a *Quarterly Review* critic in July, 1871 (vol. cxxxi, p. 229-63), declared flatly that Thornton had adopted Longe's refutation without acknowledgment. Francis A. Walker asserted that "the decided inferiority" of Thornton's treatment carried acquittal of this unpleasant charge. Taussig believes that Longe "very likely was not known to Thornton." The issue remains moot; but on the whole the theory of independent origin seems the most likely, with no graver reflection upon Thornton and Mill than an ungenerous failure later to refer to the earlier contribution of Longe. In 1883 Longe wrote a critical pamphlet of *Progress and Poverty* with a review of Henry George's and J. S. Mill's wage theories.

JACOB H. HOLLANDER

Consult: Introduction in reprint of Longe's *A Refutation of the Wage-fund Theory* . . . (Baltimore 1904).

LONGFIELD, SAMUEL MOUNTIFORT (1802-84), Irish economist and jurist. He became professor of political economy at Trinity

College, University of Dublin, and later professor of law at the same university; for a time he served as judge of the Irish landed estates court. He wrote on questions of land tenure and estate law but his chief importance lies in his economic writings. Although he adhered in general to the doctrines of the English classical school he offered many important innovations and corrections.

Longfield's main contributions were to the theory of distribution and the theory of international trade. He rejected the wage fund theory and held that wages are determined by the value of the product of labor in industries producing working class commodities, discounted by the prevailing rate of profits. He stressed the existence of non-competing labor groups but pointed out that even when there is no mobility between two crafts equality in wages can still be maintained through mobility between these and the "intermediate" occupations. He explained the rate of interest as determined on the supply side by the degree of willingness of savers to "sacrifice the present to the future" and on the demand side by the marginal value productivity of capital, which he analyzed with extraordinary anticipation of later doctrinal developments. He pointed out that profits comprise an element of return to capital and another element of wages for the skill and labor of superintendence. He denied that increase of population necessarily means lower wages, since growth of the arts or decrease in profits may offset the tendency toward diminishing returns to labor. He explained the mode of determination of the values of commodities produced under conditions of joint costs.

To the classical theory of international trade Longfield made pioneer contributions: he analyzed the way in which the existence of non-competing groups affects the choice of export and import commodities, the effects of tariffs and absenteeism on the terms of trade, the operation of comparative costs and reciprocal demand in determining the course of trade and the effect of the introduction into the exposition of the doctrine of more than two commodities. He supported on the whole the banking school doctrine and pointed out that the only significant difference between deposits and banknotes is the greater velocity of circulation of the latter. He also showed how credit expansion by one bank tends to induce similar expansion by other banks and suggested a bank credit theory of the business cycle, which ordinarily lasts approxi-

mately five years and which consists of ten successive stages.

JACOB VINER

Important works: *Lectures on Political Economy* (Dublin 1834; reprinted by London School of Economics and Political Science, Scarce Tracts in Economic and Political Science, no. viii, London 1931); *Four Lectures on the Poor Laws* (Dublin 1834); *Three Lectures on Commerce and One on Absenteeism* (Dublin 1835); "Banking and Currency" (anonymous) in *Dublin University Magazine*, vol. xv (1840) 3-15, 218-33, 371-89, and 611-20.

Consult: Seligman, E. R. A., *Essays in Economics* (New York 1925) p. 111-17; McDonnell, W. D., *A History and Criticism of the Various Theories of Wages* (Dublin 1888) sect. vi; Viner, Jacob, "The Doctrine of Comparative Costs" in *Weltwirtschaftliches Archiv*, vol. xxxvi (1932) 365, 378-79, 402, and 407.

LONGSHOREMEN is the American term for workers customarily called dockers in England, waterside workers in Australia and transport workers in many other countries. It includes all workers engaged in the loading or discharging of vessels' cargoes and covers a wide range of types from the responsible lightermen of London and the steady *Kontraktarbeiter* of Hamburg to the "banana fiends" of New York and the swarming coolies of Shanghai.

Longshoremen may be classified roughly according either to the place of work or to the commodity handled. They may be "hold men," who "break out" or stow away the cargo in the hold; "deck men," who operate the winches, give signals and assist in swinging the "draft" from hatch to pier; or "pier men," who move the cargo to or from the ship's side. The first two groups require considerable skill and experience, the third relatively little, but all three require strength and endurance. Many workers, however, are able to specialize in handling certain commodities (often to the virtual exclusion of all others), among them grain, coal, lumber, ore and bananas. And even among the handlers of general cargo, who comprise the bulk of the workers and who accept as part of the day's work every strange product which the hold of a vessel may disgorge, there are jealously guarded lines of distinction between the deep water longshoremen, the worker in coastwise shipping and the despised "shenango," who handles the contents of harbor craft.

Longshore work has long been a synonym for casual labor and its attendant evils. Periods of enforced idleness have always alternated with periods of long hard labor; each employer has striven to have a large labor reserve available to

take care of peak activity. In the old days longshoremen, often hungry and despairing, engaged in tooth and claw struggles with each other to get jobs. Earnings were usually below the barest subsistence level. In England the first real improvement came after the London dockers' strike in 1889, resulting in higher pay, partial regularization of employment and improved methods of hiring. The strike moreover compelled investigation of the prevailing bad conditions and led to some remedial legislation, including accident prevention and compensation. The success of the strike had world wide effects, stimulating union organization and legislation; but in the United States it was not until 1927, long after accident insurance had become an accepted practise, that longshoremen were brought under the provisions of the workmen's compensation law. Decasualization in some ports has also materially improved conditions by regularizing employment and equalizing earnings. But despite improvements most of the fundamental evils of longshore work still persist; in the ports of the Orient, Africa and South America conditions are probably as bad as formerly.

The total number of longshoremen is unknown, and only certain suggestive approximations may be hazarded. The United States has perhaps 120,000, of whom some 50,000 are in New York alone. London has about the same number as New York, Liverpool about 20,000, Hamburg and Antwerp some 15,000 each and Rotterdam about 10,000. The numbers fluctuate even more markedly than do those of factory workers, because the docks act as a catchall for the overflow from other trades and for the failures and misfits from all walks of life.

All attempts to calculate average earnings are also merely suggestive approximations. There are, it is true, plenty of wage rates; but so great is the irregularity of hours worked that wage rates and actual earnings are often widely separated. The 1932 wage scale for the North Atlantic ports, for instance, provided for \$.85 per hour and \$1.20 per hour overtime, based on a week of 44 hours. And yet average earnings in so far as they may be estimated for New York were probably not more than \$15 to \$20 per week even for the relatively steady men. Earnings are only slightly higher in periods of prosperity; in 1928 the majority of New York longshoremen earned less than \$30 weekly, and many earned as little as \$10. The great majority of other ports would show even lower figures. With the exception of small groups of permanent

workers in decasualized ports the earnings of all longshoremen, whether hired individually or in gangs, whether paid by the hour or by the piece, are irregular and on the average very low.

Working conditions along the water front present many peculiar and difficult problems. Longshoremen must go from pier to pier in search of work. Hiring is usually still done at each pier by a foreman who has autocratic power and who picks his men arbitrarily from a "shape" of job seekers which forms two or three times daily. If a man fails to be selected, it is practically always too late to apply elsewhere. And even if he is chosen he never knows whether the work will last for one hour or twenty hours. Petty bribery of the hiring foreman is frequently invited and sometimes necessary; sometimes longshoremen have to "share" their meager earnings with the foreman. Unions measurably reduce the bribery. Waiting rooms, wash rooms and similar facilities are usually crude and very often lacking. The work is hard, with much heavy lifting of cargo, and exposure is part of the routine. Men who have been idle for days may work uninterruptedly on a particular job from twenty to thirty hours except for time off for meals. In every country dock work is near the top in the lists of dangerous occupations. Tuberculosis, pneumonia, bronchitis, cancer and rheumatism are common; while fatigue, faulty inspection of gear, undermanning, overspeeding and chance combine to produce a high accident rate.

Underemployment has always been a major problem of dock labor, and recently technological unemployment has added still further to the hazards of job hunting. It has not yet assumed alarming proportions among deep water longshoremen, who still work with relatively simple mechanical aids; but on the Great Lakes, with their heavy traffic in grain, ore, coal and other bulk commodities which lend themselves readily to mechanization, it has transferred whole fields of activity from men to machines. Technological unemployment in other industries has moreover increased the pressure of casuals seeking jobs on the water front.

In the face of such conditions and with a labor supply chronically in excess of demand and containing many racial groups and a large percentage of casuals in addition to a nucleus of steady workers, trade union organization has not been easy. Its achievements are therefore all the more significant. In England the first small groups of the late 1880's have been transformed into the great Transport and General Workers' Union.

The International Longshoremen's Association of the United States, including in its membership perhaps one third of all American dock workers, has been less successful, although its agreements govern working conditions in many important ports of the Atlantic and Gulf coasts. In Australia the Waterside Workers' Federation has repeatedly demonstrated its strength, often to the discomfiture of the entire commonwealth. Germany, Holland and the Scandinavian countries also have strong dockers' organizations. Many of these national bodies have in turn combined to form one section of the growing International Transport Workers' Federation, which includes seamen and land transport workers as well as longshoremen. The longshoremen's unions have frequently been a progressive force in the labor movement. They stimulated the growth of the "new unionism" in England, Ireland and Australia with the stress on militancy and industrial as against craft organization; in Hamburg the harbor workers organized into one strong union with substantial control over the labor market.

On the whole collective bargaining and arbitration are still on a precarious footing. Most of the oriental, African and South American ports are virgin territory from the standpoint of permanent union organization; and even in the well organized ports of the world the strike has long been a favorite weapon. Some of the most spectacular strikes of modern history, such as those of 1889 and of 1912 in London, that of Belfast in 1907, those of 1887 and 1907 in New York (the former led by the Knights of Labor) and several major strikes in Australia, have centered about the docks. Only during the years of the World War, when their position in international commerce, strategic at all times, was still further strengthened by the emergency, did European and American dock workers agree to accept limitations upon their right to strike.

Whatever their method, organized longshoremen have always been interested primarily in wages and hours and have only recently shown sustained and aggressive interest in the more fundamental problem of decasualization. The crying need of all dock workers has long been for greater regularity of employment and of earnings, which is most difficult of attainment because each employer has tended to mobilize about his own piers a labor reserve large enough to meet his demands on his busiest days. The resultant normal oversupply of labor and haphazard distribution of jobs can be remedied only

by a carefully planned scheme of decasualization which must stress at least three major points: registration to limit the total number of men who are eligible to seek work in any given port, regulated in accordance with the port's varying needs; a centralized or at least coordinated system of hiring, in which employers hire labor from a central office instead of individually, with provision for the rapid transfer of applicants from the less busy to the more busy areas, thus substituting a smaller but unified and mobile reserve for the present stagnant pools of labor; and a guaranteed minimum weekly wage to a nucleus of steady, experienced workers which will provide each employer with the backbone of an efficient and dependable labor force. Further desirable although not vital refinements of decasualization include a central pay office, organization of both employers and workers in order to facilitate the selection of a joint committee to be vested with the power to determine policies, the dovetailing of seasonal work and a system of rotation which will serve to equalize earnings among the individuals representing each grade of labor. The system of decasualization assures longshoremen an equal chance of securing available work, eliminates the foremen's arbitrary power and regularizes employment, hours and earnings.

Hamburg and Liverpool stand out pre-eminently among the world ports which have so far experimented with decasualization. They began to carry out their plans in 1907 and 1912 respectively and were the real pioneers in the field, although London had certain piecemeal measures at a somewhat earlier date. Other decasualized ports include Rotterdam, Amsterdam, London, certain Scandinavian ports and Antwerp, which was decasualized as recently as 1929. In the United States only Seattle, Los Angeles and Portland are represented, although Boston, Houston and Galveston have developed certain features which are suggestive of decasualization. Seattle, the first American port to introduce decasualization in 1921, has achieved a degree of success which may well challenge the attention of many larger ports. The general principle of decasualization, modified to suit the requirements of each individual port, is indispensable in dealing with the problems of dock labor. Unfortunately decasualization is occasionally bound up with anti-unionism; in all three decasualized American ports the employers refuse to recognize the union, and the system is consequently strongly opposed by the Inter-

national Longshoremen's Association. But the experience of Hamburg, Liverpool and many other European ports indicates that decasualization and unionism may be harmoniously combined and that moreover the unions may become the most effective instruments of decasualization.

ELMO P. HOHMAN

See: CASUAL LABOR; PORTS AND HARBORS.

Consult: Barnes, C. B., *The Longshoremen*, Russell Sage Foundation, Publications (New York 1915); Lascelles, E. C. P., and Bullock, S. S., *Dock Labour and Decasualisation*, London School of Economics and Political Science, Studies in Economics and Political Science, no. lxxiv (London 1924); Mess, H. A., *Casual Labour at the Docks*, University of London, The Ratan Tata Foundation (London 1916); Williams, R., *The Liverpool Docks Problem* (Liverpool 1912), and *The First Year's Working of the Liverpool Docks Scheme* (London 1914); Joint Executive Committee of Longshoremen and Truckers and Waterfront Employers, "Decasualizing the 'Beach' at Seattle" in *Survey*, vol. xlix (1922-23) 96-97; New York City, Mayor's Committee on Unemployment, *Report on Dock Employment in New York City* (New York 1916); Great Britain, Ministry of Labour, Court of Inquiry, *Transport Workers—Court of Inquiry*, Cmd. 936-37, 2 vols. (1920); Shadwell, Arthur, *The Problem of Dock Labour* (London 1920); United States, Bureau of Labor Statistics, "Labor Productivity in Cargo Handling and Longshore Labor Conditions," *Bulletin*, no. 550 (1932), and "Longshore Labor Conditions in the United States" in *Monthly Labor Review*, vol. xxxi (1930) 811-30, 1055-69; Stern, Boris, "Longshore Labor Conditions in the United States" in *World Ports*, vol. xix (1930-31) 235-73; Gottschalk, Max, "Employment and Unemployment in Some Great European Ports" in *International Labour Review*, vol. xxi (1930) 519-39; "Antwerpen, de haven en de havenarbeiders" in *L'Églantine*, vol. i, no ix (Brussels 1923); "Protective Measures and Regulations for Port Labour" in *International Transportworkers' Federation, I. T. F. Documents*, n.s., no. v (Amsterdam 1927); Tillett, Benjamin, *A Brief History of the Dockers' Union* (London 1910); Mess, H. A., *Casual Labor at the Docks* (London 1916).

LÓPEZ, VICENTE FIDEL (1815-1903), Argentinian historian and statesman. López was the son of the author of the Argentinian national anthem; from his childhood he came into contact with the outstanding politicians and intellectuals of the Plata River region from the initial days of independence until the difficult period of the organization of the nation, and he was influenced by them in the direction of patriotism and of intellectual pursuits. He became a member of the reformist group known as the Asociación de Mayo, fought the dictatorship of Rosas and lived in exile in Chile, where he helped to initiate an intellectual revolution, and in Uruguay. Upon

his return to Argentina he participated in national politics but was relatively unsuccessful because of his aggressive and inflexible character. In Uruguay he taught at the University of Montevideo and from 1873 to 1876 at the University of Buenos Aires. He contributed considerably to the political, legal, economic and educational literature of Argentina but his most important work is in history, where he made bold incursions into various divisions of the subject, a noteworthy example being his contribution to American prehistory which was published, in a French translation by the orientalist Gaston Maspero, as *Les races aryennes du Peron* (Montevideo 1871). His chief works, however, are those dealing with Argentina. Of particular importance is his *Historia de la República argentina. Su origen, su desarrollo político hasta 1852* (10 vols., Buenos Aires 1881-93; new ed. 1926), in which as in other works he made frequent use of the verbal information he had received from the protagonists in the great events in the history of his country, and which is therefore regarded as the greatest repository of the oral tradition of Argentina. Abridgments were prepared by the author for use in the secondary schools. López possessed great literary talent and as a historian sacrificed much exact documentary data to his desire for literary success. He was the chief representative of the school of the philosophy of history in Argentina. His history was largely political, for he held that the country had no other kind of history. He engaged in a controversy with Bartolomé Mitre, the leader in Argentina of the erudite school of historiography which was concerned particularly with the accuracy of facts; and as a result of the encounter López demonstrated that his model was Thucydides. López' influence has been felt by those who seek to explain the phenomena of history and especially by the sociological school of historians.

RÓMULO D. CARBIA

Works: "Autobiografía" in *Biblioteca*, vol. i (1896) 325-55, reprinted in *Evocaciones históricas* (Buenos Aires 1929); *Debate histórico*, 2 vols. (Buenos Aires 1882; new ed., Biblioteca Argentina series, 3 vols., 1916); *Resultados generales con que los pueblos antiguos han contribuido a la civilización de la humanidad* (Santiago, Chile 1845); *La revolución argentina*, 4 vols. (Buenos Aires 1881); *El banco (sus complicaciones con la política en 1826 y sus transformaciones históricas)* (Buenos Aires 1891); *Curso de derecho romano bajo un plan nuevo* (Buenos Aires 1872).

Consult: Ibarguren, C., *De nuestra tierra* (2nd ed. Buenos Aires 1926) ch. vii; Rojas, R., *La literatura argentina*, 8 vols. (Buenos Aires 1924-25) vol. vii, ch. iv; Carbia, R. D., *Historia de la historiografía*

argentina, vol. i— (La Plata 1925—); Pestalardo, A., *Historia de enseñanza de las ciencias jurídicas y sociales en la universidad de Buenos Aires* (Buenos Aires 1914); Gonzales, Julio, *La emancipación de la universidad* (Buenos Aires 1929).

LÓPEZ DE PALACIOS RUBIOS, JUAN (c. 1450–1524), Spanish jurist. López de Palacios Rubios taught at the University of Salamanca, where he had studied, and at the University of Valladolid. He gained the confidence of Ferdinand and Isabella and assisted them in many of their important acts. Upon the dismissal of the members of the high court, or Chancillería, of Valladolid in 1491 he was one of the judges appointed to supersede them; when a similar court with equal powers was established at Ciudad Real he assisted as a member in the development of its tendencies. He participated in important matters involving relations with the papacy, and as a member of the Council of Castille (1504–24) he took an active part in the direction of affairs connected with the Indies and won the approval of the rigorous critic Bartolomé de las Casas. In Spanish juridical science López de Palacios Rubios represents a bridge between the Middle Ages and the Renaissance. His works, which were much consulted by later jurists, evince the somewhat undigested erudition of the mediaeval treatises; but they display a capacity for writing good Latin that other jurists of the time, such as Alonso Díaz de Montalvo, did not possess. His thesis that the American indigenes were not slaves constitutes the clearest title to fame of the Salamancan school of international law. But when he entered the realm of theory as an apologist of the Catholic kings he displayed certain weaknesses; he was willing to uphold the claims of monarchy as against papacy to the widest extent or to concede the most exaggerated powers to the latter, according to the manner in which the argument served the interests of his royal masters. It was neither as a scholar nor as a theorist, however, that he made his chief contribution to Spanish law but rather as a practical jurist who noted the defects of the contemporary law and applied adequate remedies in legislative projects. He cooperated in the preparation of the *Leyes de Madrid* of 1499, designed to improve the administration of justice. His influence upon the preparation of the highly important *Leyes de Toro* (completed in 1505), which were designed to clarify the existing law and which made important innovations in the realm of private law, particularly family law, was very great. He played a major part in the compilation of the

Leyes y privilegios del concejo de la Mesta in 1511.

ROMÁN RIAZA

Works: *Opera varia*, ed. by Juan de Barahona (Antwerp 1616).

Consult: Bullón y Fernández, Eloy, *Un colaborador de los reyes católicos: El Doctor Palacios Rubios y sus obras* (Madrid 1927).

LORIMER, JAMES (1818–90), Scottish jurist and political theorist. Lorimer was the son of the manager of an aristocratic estate and received his education at Edinburgh, Berlin, Bonn and Geneva. In 1862 after an indifferent career as an advocate he was called to the University of Edinburgh, where he lectured as professor of public law and of the law of nature and of nations until his death. In addition to legal works he published many occasional and controversial essays on political, ecclesiastical and educational questions. One of the original members of the Institute of International Law, he was the only British jurist of the day who spoke the continental language of natural law, and consequently he was long his country's academic spokesman in its delicate relations with warring foreign states.

Opposition to democracy, particularly in its Benthamite formulation, is central in Lorimer's writing. He was a member of the Conservative party and a vigorous pamphleteer against what he termed "vertical extension" of suffrage, advocating instead a system of plural votes allotted on the basis of wealth, education, age and professional position. In the field of private law he was a vigorous defender of existing inequalities in property distribution against radical and socialistic attacks. A similar insistence upon the importance of natural inequalities led him, in the field of international law, to challenge the postulate of the equality of states, to defend the principles of intervention and extraterritoriality, to deny Moslem or communist states the right to recognition and to include in his draft for an armed and effective league of nations provision for a council representing five or six powerful nations.

These practical proposals are organized by a philosophy of natural law which regards human law as declaratory of divinely established fact and holds the rectification of divinely implanted inequalities to be beyond the proper province of law. Lorimer's juristic thought is pervaded by the theologic assumption that what is good ultimately prevails, so that he finds it unnecessary

to distinguish between historical generalization and ethical criticism. His appeal to self-evident principles, in the manner of his teacher Sir William Hamilton and of the Scottish school of realistic philosophy, is commonly an appeal to generalizations from chemical or biologic laws (he tells us that he learned more law from the chemist Mitscherlich than from the jurist Puchta) or to political and ethical principles generally accepted by men of his own religion, race and class. Despite his narrow ethical outlook Lorimer served to free the study of law in Scotland from its provincial, trade school tradition by bringing students into contact with continental legal thought and by emphasizing the dependence of legal science upon economics, sociology, criminology, philosophy and theology.

FELIX S. COHEN

Important works: *Political Progress Not Necessarily Democratic* (London 1857); *Handbook of the Law of Scotland* (Edinburgh 1862, 6th ed. 1894); *The Institutes of Law* (Edinburgh 1872, 2nd ed. 1880); *The Institutes of the Law of Nations*, 2 vols. (Edinburgh 1883-84); *Studies National and International* (Edinburgh 1890), with biography and bibliography.

Consult: Flint, Robert, "Professor Lorimer" in *Juridical Review*, vol. ii (1890) 113-21.

LOTTERIES. The lottery is an arrangement in which an entrepreneur contracts with several persons in exchange for a certain payment to pay out sums of money or other valuable goods to those among them selected by a process depending upon chance. In this it resembles many forms of games of chance, which in turn are a subdivision of gambling (*q.v.*). Lotteries with money prizes are more common than commodity lotteries, or raffles, but mixed lotteries also exist, in which the winner may get either money or commodities as he prefers. Upon payment of his contribution, or stake, generally in cash but sometimes masked in another form, the participant usually gets a ticket, or chance, bearing a number; if the corresponding number is drawn he is entitled to a prize. Tickets which fail to win anything are called blanks. In the so-called interest lotteries all ticket owners get back at least the amount of their stake but only after a long period of time and without any accrued interest. In all lotteries (with very minor exceptions such as lotteries conducted by a small group entirely for its own amusement, as those arranged by ocean travelers on the basis of the day's mileage of their ship) the total of all the prizes plus the administrative costs is less than the sum of the prospective paid in stakes; the holding of a lot-

tery therefore yields a profit to the entrepreneur, unless too few chances are sold.

Lotteries may be run by national governments, by other public bodies, such as states and municipalities, by civic organizations and by private entrepreneurs. Most states supervise and tax lotteries not conducted by the state itself. The lottery may be used to increase governmental revenues, to raise funds for charitable or other civic purposes, to float a long term public loan, to provide popular amusement, to attract customers in business competition or, as a rule only clandestinely, to provide private profit. Lotteries may also be classified according to their procedural technique.

The following description of the most important forms of lottery combines procedural and functional bases of classification.

The lottery with simple number draw is used as a rule only for charitable purposes, usually as a commodity or a mixed lottery. The price of the tickets is uniform and small and their number very large, while the number of blanks is often 80 percent of all tickets. In the draw all the ticket numbers are placed in an urn or in a wheel of fortune, and as many numbers are drawn as there are prizes. The prizes are allocated to the several numbers either on the basis of the order in which the numbers are drawn or according to the prize indicated on a slip drawn from another urn or wheel of fortune simultaneously with the ticket number. Since the total value of the prizes is always less than the total paid in stakes, the probability value (the product of the possible prize and the probability coefficient) which the ticket purchaser receives for his stake is necessarily smaller than the price of the ticket. The entrepreneur's profit, provided all the tickets have been sold, is the difference between the total paid in stakes and the sum of the total value of the prizes and the overhead charges. If all the tickets are not sold, his profit depends upon whether the big prizes are won by sold or unsold tickets. It is therefore advantageous in lotteries in which experience has shown that only a small percentage of the tickets is likely to be sold, so to allocate the sum set aside for prizes that one prize, the "grand" prize, is very large, while the other prizes are correspondingly smaller. In such cases it is probable that the grand prize will be won by an unsold ticket. For example, Austria has for many years conducted for the benefit of a first aid organization a lottery in which the grand prize, an automobile, has never been won.

The class lottery, which is found only as a money lottery, is the most important form of government lottery. Its principal characteristic is that the draw does not take place all at once but in several sections or classes at certain intervals of time, the ticket price being divided into as many equal parts as there are sections. Only the proportionate partial payment need be made to participate in the drawing of the first class. Tickets are also customarily subdivided into shares, purchase of which entitles the holder to a proportionate share of the prize if the ticket's number is drawn. Tickets which win a prize in the first class are withdrawn from further play, but the remainder of their purchase price need not be paid. To participate in the drawings of the following classes, however, a ticket which did not win a prize in the first class must be renewed by payment of the proportionate price for each of the subsequent classes. As a rule two wheels of fortune are used in the draw, a number wheel and a prize wheel. By far the largest number of prizes as well as the biggest prizes are drawn only in the last class, so that one has to pay the full ticket price to be able to win a major prize. The present Austrian class lottery, established in 1913, in which prizes are paid out without any deduction and are subject to no tax, is an example of a modern class lottery. Two class lotteries are held annually, the interval between the first and final draws being somewhat less than five months. There are 84,000 tickets with 42,000 prizes in five classes. The price of a ticket is 240 schillings, or 48 schillings for each class; since tickets are also sold in fractional denominations (half, quarter and eighth tickets), one can participate in the first class for as little as 6 schillings. The smallest prizes equal the price of the ticket, while the grand prize totals 300,000 schillings; in addition a premium of 500,000 schillings is awarded the last drawn prize of 1000 schillings or more. The theory of probability shows that if the player enters only the first class he has a 9.44 percent chance of recovering his stake, while if he continues through the second class his chance is 11.09 percent, through the third 13.13 percent and through the fourth 15.04 percent; if he stays through the fifth class his chance of recovery is 70 percent. Hence it would be unwise from the player's standpoint to fail to pay the renewal fee and thus stop playing before reaching the fifth class. Fifty percent of the players lose all their stakes and 36 percent recover, while only the remaining 14 percent receive more than they put in. Of the total sum paid in for

tickets (19,142,000 schillings) 30 percent is retained by the government while 70 percent is distributed as prizes. Of the government's 30 percent there remains after deduction of the commissions of the lottery bureaus and other overhead charges an average of 3,900,000 schillings, so that the two annual class lotteries net the state about 7,800,000 schillings. In Austria this net profit is independent of the results of the draw, since the lottery bureaus (usually banks) must contract for all the tickets; in other countries, however, where not all the tickets are always sold, the net profit of the class lottery also depends upon chance.

In the number lottery, tickets are not sold at a fixed price, but the size of the stake is determined by the player himself and the prizes are not set in absolute figures but in multiples of the paid in stake. Every participant can play one or more numbers between 1 and 90; several players can bet upon the same number, and all these players win if that number is drawn. Chances apply only to one definite draw; in each draw five numbers between 1 and 90 are drawn. The player has the following betting possibilities, the prize differing in each case: indefinite selection, in which he wins if his number is among the five winning numbers; definite selection, in which he wins only if the number chosen by him appears among the five winning numbers in the order picked by him; ambo, terno and quaterno, in which he wins if two, three or four numbers respectively of those picked by him appear among the five winning numbers. Theoretically the player might also bet upon quinto, having to guess all five winning numbers, but this type of bet is not allowed in the existent number lotteries because of the extremely slight probability of winning (1 to 43,949,268); Austria also forbids betting upon quaterno. The probability value which the player gets in exchange for his stake is in every type of bet less than the stake. In Austria, for example, it is about 78 percent of the stake for indefinite selection and only 41 percent in terno play. That is why on the average the entrepreneur wins and the players lose (in 1930 the actual prize payments in Austria were 57.3 percent of the paid in stakes). In both Italy and Austria a tax on winnings reduces even further the player's chance of recovering his stake. In order to protect itself against the danger of excessive losses where many players bet upon the same numbers the lottery administration reserves the right to close certain numbers or to reduce the stakes before the draw. The amounts

wagered in this type of lottery are still on the increase and reached 18,400,000 schillings in Austria in 1930. Certain policy games or pools in the United States bear some resemblance to the number lottery, in that the prizes are determined by the last three or four integers in such large figures as the day's bank clearings in a particular city or the balance of a Federal Reserve Bank.

Lottery loans are a combination of loan and lottery: the entrepreneur (usually the government or a privileged body) sells a long term loan in the form of bonds (also called lottery chances), agreeing to pay certain holders selected by lot premiums of various amounts in addition to the paid in value. Owners of undrawn bonds receive the face value of the bond (chance loans) or the face value plus interest at a low rate (premium loans). Thus the player loses at most all or part of the interest on his capital (interest lottery). The funds for the premiums are obtained in non-interest bearing lottery loans from the interest on the loan capital and in interest bearing loans from the difference between the low interest rate paid and the prevailing higher rate of interest, and furthermore from the compound interest, if interest is paid only upon the drawing of the bond. The lottery loan provides cheaper credit than is ordinarily obtainable at the time the loan is floated; this explains its prominent role in the financial history of many governments. It may result in a loss to the loan debtor, however, if the prevailing interest rate drops during the term of the loan. Unless barred by law lottery loan bonds are traded on the stock exchanges as ordinary securities. The public may thus profit through the purchase and sale of the bonds as well as through the premiums. In most lottery loans the draw is effected in two sections separated by an interval of time. The series is drawn first, and after the lapse of several months the winning numbers are drawn from it. In the interim the bonds of the series drawn rise on the stock exchange. Finally, the lottery loans offer the further possibility of selling only the chances of a certain bond's winning in a certain draw (so-called rights). For a small sum the purchaser obtains the right to the entire premium if the bond is drawn in the draw; if it is not drawn, he loses all he paid for the right.

Lotteries for popular recreation consist predominantly of small commodity lotteries conducted at charity festivals, fairs, amusement parks and similar places. The procedure varies. Sometimes each player purchases by chance or

selection one or more numbers within a definite numerical range, and a wheel of fortune determines the winning number. Sometimes he picks one of a group of rolled up tickets, prizes varying in value having been set up in advance for the tickets bearing certain numbers. This is also the principle of the punchboard, which is used for commodity and money prizes in the United States.

Advertising lotteries involve the distribution by business men of money or commodity premiums among their customers by lot or by some other form of chance. Often each customer has, as such and without any additional payment, a chance of winning a prize, and the winner is picked by the order of sales or by some similar circumstance. Again, every package of a commodity may contain a token—a letter or a picture—invisible from the outside; and anyone getting as the result of several purchases a certain group of such tokens—a series of pictures or the letters forming a certain word—receives a prize. Where only those customers who solve a puzzle set by the entrepreneur are eligible for the premiums (so-called puzzle contests), a lottery exists only when the problem is so simple that the average person can solve it correctly or when the correct solution of the problem cannot be obtained by intellectual effort or skill but must be guessed; for in both of these cases chance governs the distribution of the prizes. Where more than one entrepreneur participates in an advertising lottery, each generally contributes to the cost of the prizes roughly according to his sales or capital; where such a lottery is conducted by an organization independent of the merchants themselves, the management of the lottery may derive a profit from the difference between the fees paid in by the participating stores and the sum of the value of the prizes and the cost of administration.

The term sweepstakes, formerly used to denote horse races in which the winner takes all the prizes, has come to be associated with a particular form of lottery based on various important horse races. A great many contributors buy chances on a particular race; some time before the race each horse is assigned to a particular ticket holder, the great majority drawing blanks and thereby losing their stakes; the holder of the ticket on the horse which finally wins the race receives all the stakes, or they may be divided among the holders of the tickets on the first three horses. A contributor to whom a horse is assigned in the draw can frequently dispose of all

or part of his ticket before the race at a substantial profit, varying according to whether his horse is a favorite or an outsider. Sweepstakes, which seem to have first developed in large numbers in England after the abolition of lotteries in 1826, were declared illegal as lotteries in that country in 1845; the legalization of charity sweepstakes by the Irish Free State in 1930 for a period of four years has complicated the problem of preventing sweepstakes transactions in England. Important sweepstakes, such as the Calcutta Sweeps and the Irish Free State Hospitals Sweepstakes, are patronized by people from all over the world.

The lottery did not exist in antiquity, although decisions were made by lot for various purposes, such as the distribution of land (distribution of the Promised Land among the Twelve Tribes of Israel, the allocation of provinces to the governors in Rome and the allotment of tilled land in the ancient Germanic village community) and the determination of guilt in primitive Germanic judicial procedure (ordeal). The commodity lottery originated in the Middle Ages in Italy, where merchants disposed of unsalable goods by means of a lottery procedure; aided by permissive interpretations of church law such lotteries spread quickly throughout Italy and were very common by the beginning of the sixteenth century. The first money lottery was probably established in Florence in 1530 for the benefit of the state. Commodity lotteries were established by various cities in Holland in the fifteenth century; in the eighteenth century the technique of the class, or Dutch, lottery, which is still used by the Dutch government, was evolved. Lotteries soon spread from Italy and Holland to France, Spain, Germany and Austria. Governments began to exercise the right of supervisory regulation to protect the public against fraud and subsequently ran lotteries themselves as a source of income. As the sovereign's power increased, the right to run lotteries was made his sole monopoly (the royal lottery prerogative), which he might lease to others. In 1569 the lottery was introduced into England by Queen Elizabeth as a state lottery and was utilized by England as a source of state revenue until 1826. The number lottery, or lotto, arose in Genoa at the beginning of the seventeenth century; it was patterned after the bets made upon the names of the five new senators, who were chosen by lot in Genoa from the list of candidates, the numbers from 1 to 90 being substituted for the candidates' names. This form of play spread so rapidly throughout

Italy that it supplanted the ordinary lottery, and even today the state lottery in Italy is of this form. During the second half of the seventeenth century the Genoese number lottery was imitated in France, Germany and Austria, whose governments granted concessions to Italian entrepreneurs; but it held its own only in Austria, where it has been run by the government itself since 1787. In Germany it was supplanted by the class lottery system patterned on the Dutch model, which was first established by the cities and has been operated by the Prussian state almost uninterruptedly since 1794. The interest lottery was first tried in Austria in 1721 with a class lottery planned for twenty-five years, which was operated by the *Orientalische Kompagnie*, and soon collapsed; it developed during the nineteenth century in the form of numerous governmental lottery loans.

After the French Revolution the lottery was opposed by liberals as a disreputable source of state revenue; this led to the abolition of state lotteries in England in 1826 and in France in 1836. France permits only licensed private lotteries for the benefit of charity and the fine arts and lottery loans issued by municipal and local governmental agencies with the sanction and approval of the national government. Except for art unions, specially exempted by an act of 1846, English law permits no lottery without specific parliamentary sanction, which has not been granted since 1826. During and immediately after the World War, however, temporary administrative relaxation tacitly sanctioned a great many charitable lotteries, and in 1918 legislation intended to legalize lotteries by registered war charities almost passed the House of Commons after having been accepted by the House of Lords. In the same year a proposal that England float a lottery loan to ease the financial burden was adversely reported on by a select committee which investigated it. Another attempt to secure parliamentary action legalizing lotteries for charitable, scientific and artistic purposes was made in 1932. In Germany, on the other hand, the *Preussisch-süddeutsche Klassenlotterie*, based upon agreements embracing several states, covers almost the entire Reich. It holds two class lotteries annually, each having 800,000 tickets and awarding prizes totaling 114,260,100 marks, a deduction of 20 percent being made by the administration when the prizes are paid. Moreover the national government levies a tax of 20 percent upon the sale of the lottery tickets. Saxony and Hamburg operate lotteries of their

own. Austria operates three types of state lottery (class, number and state charity), levying a tax of 25 percent upon all winnings except in the class lottery. In addition there are private lotteries for civic purposes licensed by the government as well as governmental loan lotteries. Numerous lotteries, most of which were established for the purpose of aiding education, existed in the United States in the early part of the nineteenth century; some were licensed by the state governments, others operated by these governments themselves. The Continental Congress in 1776 authorized a class lottery for the benefit of the soldiers in the field, and a form of premium loan was floated by the new nation in 1784. As a result of growing opposition lotteries were prohibited by New York and Massachusetts in 1833; other states followed their example, and after Congress prohibited the use of the mails for lottery purposes in 1890 the last of the privileged lotteries, the Louisiana State Lottery, which had been operated by a private company under a franchise bringing the state \$40,000 a year, transferred its operations to Honduras, where it still exists. The operation of a lottery and the sale of tickets are punishable in all states, while many states also penalize various other acts in connection with lotteries. In addition to the use of the mails for lottery purposes federal law also penalizes the importation, interstate transportation, traffic transit over any part of the United States and receipt of all printed matter pertaining to a lottery. Despite these prohibitions lotteries of various kinds still flourish in the United States. Like the United States, Japan forbids all lotteries. In the Union of Soviet Socialist Republics all lotteries were forbidden on July 24, 1923, but a statute of January 1, 1930, sanctioned such lotteries as might be approved in each individual case by the People's Commissars for Finance and for Workers' and Peasants' Inspection. The government at one time floated a premium loan but now conducts no state lottery.

The penal provisions against lotteries which exist in almost all countries are intended to prevent the excessive spread of gambling and to protect the public against fraud, as well as to safeguard the governmental monopoly in those countries which operate national lotteries and to assure effective revenue and regulatory control in those which permit private lotteries under requirements of license, tax or both. The criminal concept of a lottery is much the same in all countries, but it is impossible to distinguish it clearly, on the one hand, from other games of

chance, which are subject to other penal provisions in most countries, and, on the other, from legal advertising inducements and contests. The apparent distinguishing feature—one entrepreneur contracting with a number of players who are not juridically interrelated—is also present in gambling schemes of the type used in Monte Carlo, which are not considered lotteries. In the United States three characteristics have generally been recognized as prerequisite in order to establish an arrangement as a lottery: distribution of prizes, dependence upon chance and consideration for the right of participation; the application of these general criteria to particular cases has proved extremely difficult, however, especially in certain forms of advertising schemes.

The nature and forms of the lottery make it a problem of almost all branches of the social sciences. Two motives induce the player to exchange his money for a probability value smaller than his stake. The first is the satisfaction of a need which the lottery affords through the feeling of daring and through the tension of awaiting the results of the draw. The greater the interval of time between the purchase of the ticket and the draw, the less the influence of the gambling spirit, which is therefore most prominent in the smaller lotteries for popular recreation and in the number lottery, less prominent in the class lottery and least so in lottery loans. The second motive, the hope of winning, is based on the peculiar law of valuation according to which the subjective valuation of a potential prize does not diminish proportionately with the probability coefficient but tends to remain larger than the product of the value of the prize and the coefficient. Thus with equal probability values the small chance of winning a large sum is valued more highly than the large chance of winning a small sum. According to the theory of marginal utility the high utility value of the share of his few possessions which the poor man uses as a lottery stake should make such purchases even less economically rational. Whereas in property insurance, however, where the policyholder also values the slight probability of a large loss above its objective probability value, the law of valuation and the theory of marginal utility support each other, since a quantity of goods to be lost is involved, in the lottery this law of valuation is so strong as to overcome the opposite pull of the marginal utility factor. Superstition often strengthens the player's motives: many optimists believe that fate has destined them for good fortune and that they must "open the door to op-

portunity" by buying a ticket. In the number lottery bets upon certain numbers are motivated by dreams, prophecies and the like; modern astrology even endeavors to set up relationships between lottery winnings and horoscopes. Significant from a sociological and economic standpoint is the fact that the smaller lotteries and the number lottery are patronized largely by the proletariat, whereas the patrons of the class lottery and lottery loans are drawn chiefly from the middle class. Hence the governmental number lottery acts like an antisocial taxation of the poor; in addition it possesses the disadvantage that the prizes are won by people who, experience has shown, are not apt to make thrifty use of unearned capital. In middle class circles, however, because of characteristic habits of thrift it is more likely that lottery prizes will be employed for capital accumulation. Furthermore from the standpoint of the possibility of productive investment by the lottery administration of the large sums put into them by the people (in 1930, despite the poverty of the country and although the total population is but 6,500,000, the amounts paid into the class and number lotteries in Austria totaled 53,500,000 schillings), class lotteries and lottery loans with their long time intervals between purchase of the stake and payment of the prizes are superior to the number lottery. For this reason proposals have been made to substitute interest lotteries for the existing lotteries, either in connection with savings banks (as in the Scherl "thrift premium systems," which were the subject of much discussion in Germany between 1890 and 1904) or in the form of a governmental class lottery, in which the undrawn tickets would be repayable without interest after a long period of time. These are the basis of the Molling plan for the reform of the German class lottery, which was unanimously approved by the experts in an inquiry conducted by the Friedrich List-Gesellschaft in 1930. Liberal opposition to governmental lotteries has not been aimed at interest lotteries. With the adoption of such lotteries the exchequers of countries accustomed to revenue from the lottery monopoly would be able to retain a source of revenue which could be replaced only by an unpopular increase in taxation. If private lotteries for civic purposes and advertising lotteries are to be allowed at all, governmental regulation is desirable to protect the public against the concealment of excessively small chances of winning. From the standpoint of enforcement it is important to prevent the

evasion of existing lottery prohibitions either through participation in foreign lotteries or through the recurrent appearance of new devices which conceal lottery operations under a variety of designations. Play in foreign lotteries, which adversely affects the balance of payments and the domestic money market, persists despite existing prohibitions. The tickets of the Danish Colonial Lottery, for example, are sold exclusively outside of Denmark. Aside from these considerations of financial and economic policy the social harm resulting from excessive participation by the people in lottery play and the principal justification for the penal measures against it lie in its threat to economic morals—its tendency to accustom the masses to expect improvement in their economic situation through luck rather than through their own labor and ability or through some form of social action.

ERNST SEELIG

See: GAMBLING; SPECULATION; PROBABILITY; REVENUES, PUBLIC; MORALS.

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LOTZ, JOHANN FRIEDRICH EUSEBIUS (1770-1838), German economist. Lotz, a jurist and high administrative official of the Duchy of

Saxe-Coburg-Gotha, is considered the most capable representative of the Smith-Say school in Germany in the early nineteenth century. In his first major work, *Ueber den Begriff der Polizei und den Umfang der Staatspolizeigewalt* (Hildburghausen 1807), he set himself the task of defining the scope and administrative technique of the *Hilfspolizei* (the term designates the sphere of governmental activity in promoting economic development, as distinguished from *Zwangspolizei*, which denotes the narrower sphere of protection of life and property). Of greater importance is his *Revision der Grundbegriffe der Nationalökonomie, in Beziehung auf Teuerung und Wohlfeilheit angemessene Preise und ihre Bedingungen* (4 vols., Coburg 1811-14), which is distinguished by both its rigorous analysis of fundamental concepts and its subjective approach to the theory of value. It exerted, however, a confusing influence upon subsequent writers by its elaborate differentiation between value in use, value in exchange and price.

Lotz' main importance, however, lies in the theoretical treatment of economic policy, to which he devoted his main work, *Handbuch der Staatswirtschaftslehre* (3 vols., Erlangen 1821-22; 2nd ed., 3 vols., 1837-38). His approach is entirely from the viewpoint of the consumer: the primary object of economic policy is to provide the consumer with low cost goods and it is the task of theory to determine the circumstances which are conducive to the attainment of this objective. One of the most consistent early representatives of economic liberalism—having been converted to classical views because of his disappointment over the failure of the government's grain supply policies—Lotz extolled freedom of competition. But in investigating the prerequisites of free competition he met with the problem of the effect of unequal distribution of wealth upon freedom of enterprise. Although he did not pose the problem with complete clarity, his very awareness of it marks him as one of the most important precursors of German socialism of the chair.

M. PALYI

Consult: Roscher, W. G. F., *Geschichte der National-Oekonomie in Deutschland*, *Geschichte der Wissenschaften in Deutschland*, Neuere Zeit, vol. xiv (Munich 1874) p. 665-73; Zuckerkandl, R., *Zur Theorie des Preises* (Leipzig 1889) p. 93-108; Diehl, Karl, "Die Entwicklung der Wert- und Preistheorie im 19. Jahrhundert," and Wiese, Leopold von, "Die Lehre von der Produktion und der Produktivität" in *Die Entwicklung der deutschen Volkswirtschaftslehre im neunzehnten Jahrhundert*, 2 vols. (Leipzig 1908) vol. i, chs. ii-iii; Böhm-Bawerk, Eugen von, *Kapital und*

Kapitalzins, ed. by Friedrich Wieser, 2 vols. (4th ed. Jena 1921), vol. i tr. by William Smart as *Capital and Interest* (London 1890) p. 83-85; Palyi, Melcuior, "The Introduction of Adam Smith on the Continent" in *Adam Smith, 1776-1926* (Chicago 1928).

LOTZE, RUDOLF HERMANN (1817-81), German philosopher. The son of a physician, Lotze enrolled at the University of Leipsic as a student of medicine but took most of his courses in philosophy and the natural sciences. Intellectually he was already torn between two interests, the philosophic reconciliation of which was to be his lifelong task. These were his interest in poetry and aesthetics, which was enhanced by the inspiration of C. H. Weisse, who introduced him to the ideas developed by Fichte, Schelling and Hegel; and the interest in the natural sciences, which was prompted by the scientific reaction against idealism and *Naturphilosophie* and which Lotze developed under the guidance of such masters as E. H. Weber, A. W. Volkmann and G. T. Fechner. The whole work of Lotze is an expression of these diverging interests. The scientific interest was reflected in his work on physiology, *Allgemeine Pathologie und Therapie als mechanische Naturwissenschaften* (Leipsic 1842, 2nd ed. 1848), an attempt to expound purely mechanistic principles, and in his *Medicinische Psychologie* (Leipsic 1852), an outline of psychology from a physiological viewpoint. At the same time it was Lotze's belief that side by side with the realm of science there also exists the world of emotional values, of "happiness and unhappiness." Dissatisfied with the general worship of experience and the predominant faith in facts as a basis for the so-called exact sciences, he endeavored to vindicate the cosmic status of emotional values. For it is important not only to determine and "calculate" the course of events but also to appreciate them.

The two tendencies, the scientific and the personalistic, also found expression in Lotze's social theory. In the manner of Herbart he insisted upon a social science which should transcend the limits of individual psychology. But at the same time he also followed Herder in endeavoring to bestow meaning and purpose upon social and historical life.

Since the first stages of Lotze's creative career coincided with the collapse of German metaphysics, he refused to take the road of Hegel. Thus while believing that philosophy was concerned with reality as a whole, he denied that the course of the universe can be interpreted in terms of a single principle. A similar attitude is

manifested in Lotze's conception of history, which was for him not a general progressive advance but "a road from an unknown beginning to an unknown end."

Lotze's conviction that there existed side by side with the world of facts an emotionally revealed realm of values served to place the concept of value in the foreground and thereby to pave the way for the ever increasing significance which this notion acquired in subsequent German philosophy. To be sure, he himself formulated no doctrine of values in the proper sense of the term. But the suggestions contained in his doctrine of *Geltung*, or validity; the sharp distinction he drew between things which exist and truths which are valid, supplied thinkers like Windelband, Rickert and Simmel with a starting point for their speculations.

BERNHARD GROETHUYSEN

Important works: *Mikrokosmos*, 3 vols. (Leipsic 1856-64, 5th ed. 1897-1909), tr. by E. Hamilton and E. E. C. Jones, 2 vols. (4th ed. Edinburgh 1897); *System der Philosophie*, ed. by G. Misch, 2 vols. (Leipsic 1874-79, 2nd ed. 1879-84), vol. i tr. by B. Bosanquet as *Logic*, 2 vols. (2nd ed. Oxford 1888), and vol. ii tr. by B. Bosanquet as *Metaphysics*, 2 vols. (2nd ed. Oxford 1887).

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LOUIS XI (1423-83), king of France. When Louis XI was consecrated king in 1461 upon the death of his father, Charles VII, he had already given striking evidence of two outstanding characteristics: extraordinary administrative talent and a passion for intrigue, which had on several occasions led him to organize revolts against his father. A much maligned son, he became from the standpoint of the evolution of the French state the outstanding king of the house of Valois. Dominated by a peasantlike passion for land and gifted with remarkable political realism, he so accelerated the long process of French unification that his reign may be said roughly to mark the end of feudal France. From the duke of Burgundy he repurchased the cities of the Somme in 1463. From 1465 he had to contend with a series of powerful coalitions against him; the first of these was the Ligue du Bien Public, organized under the leadership of Charles the Bold, later duke of Burgundy, and the duke of Brittany, which aimed ostensibly to bring about a reduction of taxes but really to curb the king's

authority. Although several times temporarily worsted in the vicissitudinous struggles Louis in 1472 succeeded by clever diplomacy in detaching Brittany from the alliance with Burgundy and England. In the meantime the opportune death of Charles, duke of Guyenne, had enabled him to seize that province. In 1475 he turned an English invasion to profit by bribing the enemy to retreat and to join him in an economic alliance, sealed by the Treaty of Picquigny. Upon the death of Charles the Bold in 1477 he took possession of Burgundy, Artois and Picardy, the last involving him in a bitter war with Maximilian of Austria; in 1481 he retook Maine and Provence from Charles of Anjou.

In his struggle against the nobles Louis followed and developed his ancestral policy of looking to the cities for support and of working with them for mutual benefit. His reign was characterized by a great development of the bourgeoisie, which he favored not only against the nobles but against the lower classes, as well as by the rise of fairs and of commercial markets. Almost his last concern was to create a uniform system of weights and measures and to assure internal commercial freedom. But he also established a supervision over the cities closer than that of any previous king, diminishing local liberties and appointing mayors of his own choice. Although preserving most of the older governmental organs he reenforced his individual authority by creating a new personnel recruited from the bourgeoisie and petty nobility. While he always preferred negotiations to war he expanded the army as a bulwark of kingship and introduced a considerable degree of permanence into royal taxation.

Louis XI was a patron of culture, the liberator of François Villon, the friend of Philippe de Commines; Jean de Ockeghem, the famous musician, and Jean Fouquet, the portraitist and miniaturist, were in his service. He displayed great interest in printing, the French origins of which date from his reign. A tireless worker, a self-reliant and autocratic king, who, however, regarded his power as a means for developing France, Louis XI was justly called by Michelet the sage of the fifteenth century. No French king has been more grossly distorted by legend.

PIERRE CHAMPION

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LOUIS XIV (1638-1715), king of France. He became king in 1643 on the death of his father, Louis XIII, but governed independently only after the death of Mazarin in 1661. During the fifty-four years of his personal reign all Europe regarded him as the archetype of a king. Louis XIV succeeded more completely than any of his predecessors in making a reality of monarchy by divine right. He never admitted that he, who possessed the sacredness of divine ordination, could be subject to any legitimate limitation in the exercise of his authority. He was the master of all his subjects, of their possessions, even of their consciences. His revocation of the Edict of Nantes in 1685 was in his opinion the mere fulfilment of his duty to God to redress their errors. Louis XIV, the absolutist, was also the first French king who was an administrator. He cooperated industriously with his great minister, Colbert, in the latter's schemes to promote the unity and grandeur of the nation and so to enhance the majesty of the king. The first French system of centralized administration, the system which was to survive until the Revolution of 1789, dates from his reign. Progressively obliterating the local powers and supplanting them by the intendants, whom he sent as his agents to the provinces, he instituted a regime which in view of its control by a power believing itself responsible only to God was inevitably arbitrary. Thus Louis XIV deprived the monarchy of its old bulwarks in the nation. He aggravated the misery of the people, especially in the rural districts, and alienated the bourgeoisie, who as the incumbents of most of the local offices found themselves dispossessed by the intendants. The nobility he grouped about him at his court, but by that very act he incurred the responsibility of providing for its support and linked the fortunes of the monarchy to those of the privileged classes. The origin of the grievances producing the revolution is to be sought in the reign of Louis XIV. Louis' foreign policy was overly inspired by his love of glory and war, which on the occasion of the War of the League of Augsburg (1689-97) incited almost the whole of Europe against him. His urge toward aggrandizement, however, although it eventuated in internal exhaustion in the last years of his reign led to the extension of the national boundaries

and to the addition of a number of provinces which soon became wholly French: Alsace, Artois, Flanders and Franche-Comté. Louis' place is especially great in the history of French civilization. The classic French authors and artists found in him understanding and encouragement, and at the same time by surrounding himself with them he attained to an Augustan splendor. The Versailles which he created still arouses the admiration of all who contemplate it. It was with good reason that Voltaire called the seventeenth century the century of Louis XIV.

G. PAGES

Consult: Pages, G., *La monarchie de l'ancien régime* (Paris 1928), and "Ludwig XIV" in *Menschen die Geschichte machten*, ed. by P. R. Rohden and G. Ostrogorsky, 3 vols. (Vienna 1931) vol. ii, p. 338-44; Lacour-Gayet, G., *L'éducation politique de Louis XIV* (2nd rev. ed. Paris 1923); Lavisse, Ernest, "Louis XIV" in his ed. of *Histoire de France depuis les origines jusqu'à la Révolution*, vol. vii (Paris 1906-07) pts. i-ii; Rambaud, A. N., *Histoire de la civilisation française*, 2 vols. (11th ed. Paris 1909-17) vol. ii; Mentz, Georg, *Ludwig XIV, sein Reich und seine Zeit* (Bonn 1922); Heinacker, Willy, *Die Persönlichkeit Ludwigs XIV*, *Historische Studien*, vol. cxxv (Berlin 1915).

LOVETT, WILLIAM (1800-77), English publicist and reformer. Lovett was born in Cornwall and in 1821 he migrated to London. It was a time when doctrines and methods of social reform were being hammered out and he was soon at the hub of working class radicalism. In 1836 he organized the London Working Men's Association and shortly thereafter he became one of the leaders in the Chartist movement. He spent a year in jail (1839-40) as a result of his protests against police interference in a Birmingham Chartist meeting, but his decided opposition to Feargus O'Connor and the "physical force" element eventually estranged him from the conduct if not the ideals of the movement.

The increasing weakness of the Chartist cause confirmed Lovett in his views on the vital necessity of education and its power to emancipate the working classes, mentally, socially and politically. He taught working men's classes, wrote textbooks and in his desire for an enlightened public opinion contended strongly against all attempts to curtail the right of citizens to express their opinions. Like the other Chartists he desired universal suffrage; but he wished to see it extended also to women, a provision which was excluded from the charter because of a fear that it would "retard the measure." For the reform of Parliament in addition to the measures set forth in the charter Lovett advocated a compulsory

examination of all candidates, the delegation by Parliament of a limited and carefully defined number of matters to "district legislatures" and the restriction of the power of the House of Lords to obstruct legislation. Communism, Owenite socialism, except for a brief period in his youth, and nationalization of the land did not commend themselves to him; but he held that great benefits might be realized by judicious co-operation between capital and labor in the production of wealth. He proposed to check accumulations of wealth by abolishing primogeniture and entail and imposing heavy taxation upon inherited wealth and unearned increments. He also advocated the abolition of all indirect taxes.

Throughout his life Lovett was an internationalist. He held that the interests of the toiling masses of all countries are identical and he embodied his views in several voluminous addresses to the working men of other lands. War he regarded as "a pernicious waste of the fruits of . . . industry" and an "instrument for perpetuating national feuds and political slavery." As a first move toward its final abolition he proposed a "congress of nations" and a "standing court of adjudication," the former to devise a code of international law and to declare the outlawry of the instigators of wars, the latter to effect rational settlements of disputes between nations.

ALFRED PLUMMER

Important works: *Life and Struggles* (London 1876; new ed. with introduction by R. H. Tawney, Bohn's Popular Library, 2 vols., 1920); *Chartism*, in collaboration with J. Collins (London 1840, 2nd ed. 1841); *Social and Political Morality* (London 1853).

Consult: Hammond, Barbara, *William Lovett, 1800-1877*, Fabian Tract no. 199 (London 1922); Hovell, Mark, *The Chartist Movement*, ed. by T. F. Tout, University of Manchester, Publications, Historical series, no. xxxi (London 1918).

LOWELL, JAMES RUSSELL (1819-91), American author, editor and diplomat. Lowell came of a distinguished Massachusetts family; after his graduation from Harvard he was admitted to the bar but turned at once to literature. In 1848 he achieved wide fame with *The Biglow Papers*, semihumorous dialect poems caustically attacking the Mexican War and the annexation of Texas. As professor of modern languages at Harvard (1856-76) and as editor of the newly founded *Atlantic Monthly* (1857-61) he established his position as the outstanding American literary critic and scholar of the period. During the Civil War his second series of *Biglow Papers* and various patriotic poems exerted a heartening

influence upon the North. From 1864 to 1872 Lowell served with Charles Eliot Norton as co-editor of the *North American Review* and helped to supply the first intelligently sympathetic interpretations of Lincoln's reconstruction policy and of his statesmanship in general. Lowell's powers as a polished writer and speaker were obvious qualifications for a diplomatic career, and under Presidents Hayes and Arthur he served as minister first to Spain and then to Great Britain, where he was influential in strengthening Anglo-American intellectual ties.

Less self-reliant than Emerson or Thoreau, Lowell reflects in his opinions the principal intellectual fluctuations of a confused period of transition. In his youth an ardent supporter of William Lloyd Garrison's attacks on the old party system, the laws and the constitution, he found a more reputable haven for his idealism in the newly formed Republican party, which he continued to serve as a loyal and at times partisan spokesman both during its period of aggressive libertarianism and during its later period of intrenchment. But with the unmistakable evidences of deterioration in Republican leadership and policy after Lincoln's death Lowell shifted uneasily to the left, aligning himself with the moderate reformers—the American Manchesterians, Godkin, Schurz and Curtis—and supporting their assaults on the evils of the tariff and administrative corruption. While he made few speeches on issues of the day and indulged in few polemics, his fierce denunciation of political corruption added prestige and philosophical weight to the cause of moderate reform. His acquaintance with the United States hardly extended beyond the Alleghenies and his sympathies never succeeded in outgrowing a certain intellectual and social narrowness. He knew little of western agrarianism and what he knew of it he distrusted as radical. Disliking novelty he shrank from such movements as that for woman's rights and protested against the extension of suffrage in England. His unshaken reverence for the past kept intact his belief that the republic would endure only while the ideas of its founders remained dominant.

ALLAN NEVINS

Important works: *The Writings of James Russell Lowell*, 11 vols. (Boston 1896-1900); *Anti-slavery Papers*, ed. by W. B. Parker, 2 vols. (Boston 1902); *Letters*, ed. by C. E. Norton, 2 vols. (New York 1894).

Consult: Parrington, Vernon Louis, *Main Currents in American Thought*, 3 vols. (New York 1927-30) vol. ii, p. 460-72; Grattan, C. Hartley, "Lowell" in

American Mercury, vol. ii (1924) 63-69; Mims, Edwin, "Lowell as a Citizen" in *South Atlantic Quarterly*, vol. i (1902) 27-40; Shea, Leo Martin, *Lowell's Religious Outlook* (Washington 1906).

LOWELL, JOSEPHINE SHAW (Mrs. Charles Russell Lowell) (1843-1905), American social reformer. Josephine Lowell was one of the notable group of men and women who during the last quarter of the nineteenth century gave shape and impetus to the formation of social welfare agencies and institutions in the United States. She began her career with relief activities during and after the Civil War. In the early 1870's she became active in the State Charities Aid Association of New York and in 1876 was appointed the first woman commissioner of the New York State Board of Charities. A real commitment to the responsibilities of her office led her to investigate conditions in public institutions for the dependent and defective, a study which gave rise to most of her later projects. Among these may be counted her founding of the Charity Organization Society of New York, one of the earliest and probably the most influential of its kind in the country, and her campaign for state reformatories for women, for custodial care of feeble-minded women, for the establishment of a municipal lodging house in New York City, for the introduction of police matrons and for important reforms in the care of dependent children and the insane. Like Letchworth and Dugdale she based her reforms on sound data obtained by scholarly work in field and office. Although her actual work was confined to the city and state of New York, an imagination susceptible to new ideas and sensitive to social evils, a facile pen and great personal force made her influence practically national in scope. She wrote more than a hundred papers, articles, pamphlets and reports. Outside the field of social work her activities included civil service reform, an interest in the relations of capital and labor that resulted in the founding of the Consumers' League of New York, of which she was the first president, and active participation in the Philippine Progress Association, an organization opposed to American domination of the Philippines.

PHILIP KLEIN

Consult: The Philanthropic Work of Josephine Shaw Lowell, ed. by W. R. Stewart (New York 1911); De Forest, Robert W., and others, *In Memoriam: Josephine Shaw Lowell*, New York City Charity Organization publication (New York 1906).

LOYD, SAMUEL JONES. *See* OVERSTONE, LORD.

LOYOLA, IGNATIUS DE (1491-1556), Spanish religious leader. Loyola, a Spanish nobleman, had been a military officer for ten years when protracted illness resulting from a wound received in 1521 brought to him, as to so many other Catholic saints, conversion and renunciation of the world. The first phase of his new life was marked by asceticism and in 1523 by a pilgrimage to Palestine which served merely as personal penance. It was only during his subsequent sojourn at Spanish universities and particularly at the University of Paris from 1528 to 1535 that he began to exert influence upon others through private preaching. In 1534 he organized a small group of his friends at Paris into a new order for missionary work among the unbelievers of Palestine; this embryonic order, while already imbued with the strong militaristic spirit which the mature Society of Jesus owed partly to Loyola's early life as a Spanish noble, as yet manifested none of the essential elements of the characteristic Jesuit point of view. When his missionary purpose was frustrated as a result of the outbreak of war between Venice and Turkey, Loyola went to Rome in 1537. There in the atmosphere of crisis created in the church by the Protestant Reformation he reformulated his plans and dedicated his order to the education of youth, preaching and the unconditional performance of whatever task was imposed by the papacy. The metamorphosis undergone by the society between 1534 and 1540, when the Curia confirmed it on the basis of the plan of 1537, attached particularly to its relations with the church. As a result of his experiences in Rome Loyola's impulse to care for souls became fused with his passionate desire to defend the church. Hence unwavering obedience to the Curia and absolute belief in the dogmas of the church to the exclusion of all private judgments became cardinal points in his system; not only were they prescribed for Jesuits but the order consecrated itself to the task of imposing them on the entire world. By this identification of the doctrines of the church with the will of God, Loyola represents the final stage in the evolution of Catholicism into a religion of authority. Luther had upheld the individual conscience; Loyola reacted by condemning it to annihilation. Thus since this period there have existed two fundamentally opposed ideals in Christian religious life. In the course of its later development the order was modified in important ways: it came to equate its own authority with that of church; and its general tone was greatly influenced by

the exigencies of warfare against Protestantism, in the struggle against which it had become an important power by the time of Loyola's death. His own views, however, remained unchanged after 1537. Henceforth he led a zealously active life at Rome, founding the Collegium Germanicum, persuading Paul III to establish the Roman Inquisition and creating asylums for children and unfortunate women. He became the first general of the order in 1541 and for the rest of his life carried on constant correspondence with his colleagues, assisting them with sagacious counsel and adjusting their disputes. In 1550 he prepared the society's definitive constitution, which he revised in 1552 and which the chapter general confirmed in 1558.

WALTER GOETZ

Works: Loyola's letters and instructions can be found in *Monumenta ignatiana*, 1st ser., 12 vols. (Madrid 1903-14), his spiritual exercises in 2nd ser. (Madrid 1919), and his miscellaneous writings in 4th ser., 2 vols. (Madrid 1904-18).

Consult: Gothein, Eberhard, *Ignatius von Loyola und die Gegenreformation* (Halle 1895); Funk, Philipp, *Ignatius von Loyola*, Die Klassiker der Religion, vol. vi (Berlin 1913); Rose, S., *St. Ignatius Loyola and the Early Jesuits* (London 1891); Sedgwick, H. D., *Ignatius Loyola: an Attempt at an Impartial Biography* (New York 1923); Joly, Henri, *St. Ignace de Loyola* (3rd ed. Paris 1899), tr. by Mildred Partridge (London 1899); Desdevives du Dezert, G., in *Revue hispanique*, vol. xxxiv (1915) 1-72; Zarneke, L., "Die Exercitia spiritualia des Ignatius von Loyola in ihren geistesgeschichtlichen Zusammenhängen" in *Verein für Reformationsgeschichte, Schriften*, vol. xlix, pt. i (1931); Hughes, T. A., *Loyola and the Educational System of the Jesuits* (London 1906); Pastor, Ludwig von, *Geschichte der Päpste seit dem Ausgang des Mittelalters*, vols. i-xiv (7th-12th eds. Freiburg i. Br. 1925), English translation ed. by F. I. Antrobus and R. F. Kerr, vols. i-xx (1st-5th eds. London 1922-30) vol. xii, chs. i-ii, vol. xiii, ch. vii.

LOYSEAU, CHARLES (1564-1627), French jurist. Loyseau was bailiff at Châteaudun, then advocate at the Parlement of Paris. His works, which are highly valued, are devoted to public and private law. His *Cinq livres du droit des offices* (Châteaudun 1610) is devoted to the study of the royal administration. At the time when Loyseau was writing the Edict of La Paulette had just sanctioned the sale and heredity of legal offices, and this practise was tending to spread into the army and the other branches of the administration. Loyseau protests sharply against this method of recruiting, which weakens the power of the state and gives few guaranties to its citizens. Despite the success of this book the sale of offices continued until 1789. In his *Traité des*

seigneuries (Paris 1608), to which must be added the *Discours de l'abus des justices de village* (Paris 1603), Loyseau examines the vestiges left in seventeenth century France by political feudalism and in this connection describes the origins of the feudal system. He shows himself very hostile to the manorial justices, the evils of whose offices he had ascertained in his own functions as magistrate. Without daring to propose their complete suppression he endeavored to limit feudality to privileges purely honorific and pecuniary, depriving it of all influence in the exercise of the public power. His *Traité des ordres* (Châteaudun 1610) describes the social hierarchy of his time divided into clergy, nobility and the third estate, and its effects from the point of view of private law. In his *Traité du déguerpissement* (Paris 1597) Loyseau following the example of Dumoulin attempts to achieve the synthesis of Roman law with the various *coutumes* of the north of France. This work based on extensive historical and practical knowledge shows the progress of ideas in the seventeenth century in the direction of a codification of French law.

GEORGES BOYER

Works: *Oeuvres complètes* (Paris 1640; 4th ed. Lyons 1701).

Consult: Lelong, Jean, *La vie et les oeuvres de Loyseau* (Paris 1909); Sée, Henri, *Les idées politiques en France au XVII^e siècle* (Paris 1923) bk. i, ch. i, pt. ii.

LUBBOCK, SIR JOHN, FIRST BARON AVEBURY (1834-1913), English politician, anthropologist and naturalist. Lubbock, a banker by profession, served in Parliament from 1870 to 1900, when he was raised to the peerage. He was a consistent opponent of socialism, of social legislation and of home rule, an ardent defender of the imperial policy of Great Britain, especially during the Boer War, and an advocate of free trade and parliamentary reform. His name is associated with an act for the establishment of bank holidays passed in 1871. He was influential in financial and educational circles and in municipal politics, serving as president and director of many organizations.

Lubbock's diversified scientific interests were stimulated largely by his friend Charles Darwin, in defense of whose evolutionary doctrine he was along with Huxley most outspoken. After archaeological research and studies of collections of prehistoric artifacts in the museums throughout Europe he prepared a series of monographs, later recast and published as *Pre-historic Times*

(London 1865, 7th ed. 1913), in which he revised the classifications of the Danish archaeologists by dividing the stone age into two periods, the palaeolithic and the neolithic. He later refused, however, to accept the further subdivision of the palaeolithic period suggested by Gabriel de Mortillet. He adopted an extreme evolutionary position in his approach to the study of surviving savages in his *The Origin of Civilization* (London 1870, 7th ed. 1912); this attitude made him partial to ethnological documents emphasizing the simplicity and cultural inferiority of primitive peoples and caused him to disregard more authentic contrary evidence then available. He argued with Bachofen, Morgan, Howitt, Spencer and Gillen that prior to marriage there existed an original state of sexual promiscuity, which he designated as communal marriage, but he vigorously dissented from their theory that exogamy arose as a result of conscious human effort to improve morals and to avert the dangers of inbreeding. Under the influence of McLennan he ascribed exogamy to marriage by capture, contending that capture alone could explain the origin of individual marriage by giving man a right to monopolize a woman to the exclusion of his fellow clansmen. The origin of totemism he attributed to the practice of naming individuals and later their families after animals. His evolutionism led him, in controversy with Tylor and Lang, to deny the existence of religion in primitive society.

Lubbock was a pioneer in the experimental study of animal behavior; he also made original researches in the field of botany and wrote two popular books on geology. The circulation of his sententious lay sermons on ethical questions totaled over half a million copies.

BERNHARD J. STERN

Other important works: *Ants, Bees and Wasps* (London 1882; new ed. by J. G. Meyers, New York 1929); *On the Senses, Instincts and Intelligence of Animals* (London 1888); *Essays and Addresses, 1900-1903* (London 1903).

Consult: Hutchinson, H. G., *Life of Sir John Lubbock, Lord Avebury*, 2 vols. (London 1914); *The Life-work of Lord Avebury*, ed. by U. Lubbock Grant Duff (London 1924); Lang, Andrew, "Lord Avebury on Marriage, Totemism, and Religion" in *Folk-lore*, vol. xxiii (1911) 402-25; Stern, Bernhard J., *Lewis Henry Morgan: Social Evolutionist* (Chicago 1931).

LUBECKI, FRANCIS XAVIER, PRINCE DRUCKI (1778-1846), Polish statesman. Appointed by Alexander I in 1816 to represent the Kingdom of Poland on the liquidation commission which was to apportion the debts and assets

of the principality of Warsaw between the Kingdom of Poland, Austria and Prussia, Lubecki secured considerable advantages for his country's treasury. In 1821 he was appointed minister of finances in the Kingdom of Poland. He reorganized public finances, reduced expenditures and improved the organization for the collection of taxes, especially indirect taxes, on which he placed particular emphasis. These measures resulted in a surplus in the first year and in almost all subsequent years of his administration. The foremost personality among the ministers of the Kingdom of Poland, he played a decisive role in the whole economic policy of the state and contributed greatly to Polish industrial development. His economic policy favored industry rather than agriculture. When in 1822 Russia adopted a protective tariff, a similar tariff was adopted by the Kingdom of Poland under Lubecki's influence, which made it possible to secure for twenty years a Polish-Russian tariff on terms very favorable to Polish industry. The resulting customs war with Prussia was settled in 1825 by a considerable reduction of the import duties on Polish grain as compared with those established by the hostile Prussian tariff of 1823. In order to increase the productiveness of the large agricultural estates, which especially at the time of the customs war were suffering from low prices and the burden of old debts, Lubecki established in 1825 a credit association which furnished the estate owners with long term credit at low rates. In 1828 on his initiative the Polish Bank was founded as a state institution to administer the public debt and to offer credit, especially on short terms, to industry and commerce. This whole activity, which contributed greatly to public welfare, was interrupted by the Polish-Russian war.

JAN RUTKOWSKI

Consult: Smolka, Stanisław, *Polityka Lubeckiego przed powstaniem listopadowym* (Lubecki's policies prior to the November insurrection), 2 vols. (Cracow 1907); Radziszewski, Henryk, *Skarb i organizacja władz skarbowych w Królestwie Polskiem* (The Treasury and the fiscal organization of the Kingdom of Poland), 2 vols. (Warsaw 1907-08) vol. i, and *Bank polski* (The Bank of Poland) (2nd ed. Posen 1919); Jasiukiewicz, Stanisław, *Der landwirtschaftliche Kreditverein im Königreiche Polen, 1825-1910* (Munich 1911); Gasiorowska, Natalja, *Górnictwo i hutnictwo w Królestwie Polskiem, 1815-1830* (Mining in the Kingdom of Poland) (Warsaw, n.d.).

LUBIN, DAVID (1849-1919), agrarian reformer. During his childhood Lubin's family emigrated from Poland to the United States,

where at the age of twelve he became a full time wage earner. In 1874 he established himself as a merchant in Sacramento. This business venture grew into one of the largest department stores and mail order houses on the Pacific coast, and its prosperity enabled him to devote the last twenty-five years of his life to public welfare projects.

In the early 1880's Lubin became interested in fruit and wheat growing in California and his practical experience led him to devote himself to the problems of the farmers in his region. He fought successfully against the unregulated monopoly control of freight rates. Later he became convinced that agriculture was unduly burdened by the tariff and attempted to secure support for a bounty on agricultural exports. But the regulation of transportation rates and the attempt to make the tariff effective for agriculture were not sufficient. He centered his attention on world price making forces. His observations of the results of the activities of speculators on farm prices led him to the conclusion that there should be an international clearing house of information on agricultural crops, available to farmers of all nations. His own government offered no encouragement to his proposal and it was also rejected in England and France. But Lubin, who had a tenacity of purpose and a zeal for service which approached religious fervor, succeeded in converting the king of Italy to his cause. The International Institute of Agriculture (*q.v.*) was created at Rome in 1905, one of the first of the international organizations to promote economic cooperation, the benefits of which have been so much emphasized since the World War. Lubin was the official representative of the United States at the institute until his death.

ASHER HOBSON

Consult: Agresti, O. R., *David Lubin* (Boston 1922); Hobson, Asher, *The International Institute of Agriculture*, University of California, Publications in International Relations, vol. ii (Berkeley 1931).

LUCAS, SIR CHARLES PRESTWOOD (1853-1931), British administrator and historian. Lucas studied at Winchester and Oxford and became a clerk in the Colonial Office. Having acquired a vast knowledge of imperial affairs he planned a *Historical Geography of the British Colonies*, of which he himself wrote the introduction and six volumes. The object of this work, a pioneer work in the field, was "to try to give a connected and accurate account of

British colonisation, its methods, agencies and results, and of the various provinces of the British Empire." Several of Lucas' lesser writings did much to stimulate interest in colonial problems, and his scholarly work augmented and encouraged imperial sentiment in the 1890's. He held that decentralization was a means of preserving the empire and stressed the peculiar idea that the American Revolution was a blessing to the mother country since it taught a new approach to colonial problems. At the same time he looked upon the opponents of the American case in the prerevolutionary period as imperial heroes.

Lucas became assistant undersecretary of state in 1897, while Joseph Chamberlain was colonial secretary, and supported Chamberlain's imperial schemes with enthusiasm. From 1907 until his retirement in 1911 he was head of the dominions division of the Colonial Office.

For fifty years Lucas was the moving spirit of the Working Men's College in Great Ormond Street, London. He served as chairman of the Royal Colonial Institute and on its behalf edited *The Empire at War* (5 vols., London 1921-26), a history of "imperial cooperation in war time."

I. L. EVANS

Important works: *Historical Geography of the British Colonies*, 11 vols. (Oxford 1887-1911; new ed., vols. i-viii-2 1905-31); *The Canadian War of 1812* (Oxford 1906); *A History of Canada, 1763-1812* (Oxford 1909); *Greater Rome and Greater Britain* (Oxford 1912).

LUCHAIRE, ACHILLE (1846-1908), French historian. Luchaire was for many years professor at the Sorbonne, where he succeeded Fustel de Coulanges. His specialty was the history of French institutions and society in the period of the direct Capetians; that is, from the end of the tenth century to the beginning of the fourteenth. His first works in this field aimed to show the degree to which the Capetian dynasty had been a continuation of the Carolingian line, the extent to which it had undergone the influence of the feudal environment and finally to what degree it had gradually restored the monarchical principle in France at a time when a Romanistic concept of the state was tending to be revived in most of the countries of Europe, notably in the empire and in England. His *Histoire des institutions monarchiques de la France sous les premiers Capétiens, 987-1180* (2 vols., Paris 1883; new ed. 1891) was epoch making; he later completed it in his *Études sur les actes de Louis VII* (Paris 1885) and especially his *Louis VI le Gros* (Paris 1890).

Then enlarging the frame he published successively two books on the urban institutions of the same epoch, *Les communes françaises à l'époque des Capétiens directs* (Paris 1890; new ed. 1911) and a *Manuel des institutions françaises: période des Capétiens directs* (Paris 1892), which has remained a classic and which treats of all civil as well as of all ecclesiastical institutions. He then devoted himself to the history of the society itself, especially in the two studies which he contributed to Lavisse's *Histoire de France* on "Les premiers Capétiens" (vol. ii, pt. ii) and "Louis VII, Philippe-Auguste, Louis VIII" (vol. iii, pt. i) and in a series of lectures on Philip Augustus out of which issued his book on *La société française au temps de Philippe-Auguste* (Paris 1909; tr. by E. B. Krehbiel, New York 1912). His studies on Philip Augustus led him to study at first hand the correspondence of Innocent III and to publish his *Innocent III* (6 vols., Paris 1904-08), which explained the role of the papacy at the end of the twelfth century and the beginning of the thirteenth.

LOUIS HALPHEN

Consult: Halphen, L., in *Revue historique*, vol. c (1909) 110-13; Imbart de la Tour, Pierre, "Notice sur la vie et les oeuvres de M. Achille Luchaire" in Institut de France, Académie des Sciences Morales et Politiques, *Séances et travaux . . . Compte rendu*, vol. clxxii (1909) 529-62.

LUCHITSKY, IVAN VASILEVICH (1845-1918), Russian historian. Luchitsky was born in the Ukraine and studied at the University of Kiev, where he was appointed docent in 1874 and professor in 1877.

From the beginning of his scientific career he was interested in the history of France, especially of French institutions. During his first sojourn in France (1873-75) he studied the religious wars, working in the archives of Paris, Nîmes, Toulouse, Lyons, Grenoble and Montauban, where he discovered new facts concerning the social and political organization of the Protestants. Thenceforth he devoted himself entirely to economic and social history, especially to the history of property. At first he studied from archive documents the system of communal property in the Ukraine. More important, however, was his work on the history of property in France in the eighteenth century. He devoted almost all his vacations to intensive work in French archives, particularly of the departments. He initiated a fruitful method, the essential feature of which was the use of statistics, which alone could furnish a complete descrip-

tion of the redistribution of property. He depicted on a vast scale the tax rolls and especially the rolls and declarations pertaining to the *vingtièmes*. Thus he was able to determine with approximate correctness the proportion of land in the possession of the various social classes for most of the regions of France in the eighteenth century. He utilized also the documents relating to the sale of national property during the revolutionary period.

Although Luchitsky was never able to synthesize, as he dreamed of doing, all his material into one great work, his published studies contained his essential conclusions, which are of primary interest for the economic and social history of France. He was able to establish for the eighteenth century that the rural property of the clergy, except in the north of France, amounted to only a small proportion of the territory; that the property held by the nobility was more extensive, varying from 15 to 20 percent; that the peasantry held a truly important portion of the land, more or less considerable according to the region but often exceeding 50 percent in the southern and central sections of France; and that the property of the bourgeoisie was far from insignificant. Thus Luchitsky proved irrefutably that peasant holdings in France do not date from the revolution, which merely emancipated their land permanently by abolishing the laws and seigniorial burdens that encumbered it and which also by the sale of national property increased its size appreciably. In the last analysis these studies show that the redistribution of property among the various social classes placed France in an altogether original situation; which distinguished it from the other countries of Europe and the consequences of which are still perceptible today.

A man of broad vision, Luchitsky did not confine himself to his special researches. He was profoundly interested in public affairs: he was a member of the municipal council of Kiev and of the zemstvo of Poltava and in 1908 was elected to the third national Duma, where he was a very active member of the Constitutional Democratic (Cadet) party.

HENRI SÉE

Important works: *Krest'yanskoe zemlevladienie vo Frantsii na kanune revolyutsii, preimushchestvenno v Limuzene* (Kiev 1900), tr. into French as *La propriété paysanne en France à la veille de la Révolution, principalement en Limousin* (Paris 1912); *Sostoyanie zemlevladienchiskikh klassov vo Frantsii na kanune revolyutsii i agrarnaya reforma 1780-93 gg.* (Kiev 1912), part i tr. into French as *L'état des classes agricoles en France à*

la veille de la Révolution (Paris 1911); "Otchuzhdenie natsional'nikh imushchestv vo Frantsii v kontse xviii vekov" in *Russkoe bogatstvo* (1912), no. ii, p. 102-24, no. iv, p. 50-78, tr. into French as *Quelques remarques sur la vente des biens nationaux* (Paris 1913).

Consult: Kareyev, N., in *Rossiiskaya Akademiya Nauk, Izvestiya*, ser. vi, vol. xii (1918) 2029-38; Sagnac, Philippe, "La propriété foncière et les paysans en France au xviii^e siècle d'après les travaux de M. J. Louchitsky," and Sée, Henri, "La propriété rurale en France au xviii^e siècle d'après les travaux de M. Louchitsky" in *Revue d'histoire moderne et contemporaine*, vol. iii (1901-02) 156-71, and vol. xviii (1913) 257-67; Sée, Henri, *Esquisse d'une histoire du régime agraire en Europe aux xviii^e et xix^e siècles* (Paris 1921).

LUCIAN (c. 120-c. 200), Greek satirist. Lucian was born at Samosata in Syria but at an early age he went to Greece and became thoroughly imbued with Atticism, acquiring his fame during the reigns of Antoninus Pius, Marcus Aurelius and Commodus. He had a quick and brilliant intellect and he achieved great success by giving public readings, which were then the fashion in all parts of the Greco-Roman world and which were often little more than *jeux d'esprit*. At about the age of forty he turned from these to the satiric dialogue with a view to becoming a moralist and pamphleteer. He found his models in the work (now lost) of the cynic Menippus of Gadara and still more in the Attic comedy of Aristophanes and Eupolis. From that time his spirit of mockery, his sparkling animation and wit took a wider range. His dialogues, true comedies in miniature, transport the reader into a world of fantasy into which Lucian frequently introduces, under the guise of fiction, men and things of his age. At times, as in the *Dialogues of the Dead* and similar compositions, he attacks the vices and passions which he encounters—greed, the insolent ostentation of the rich, ambition, decadent morals; again, as in the *Philosophies for Sale*, the *Runaways* and the *Fisherman*, he derides the vain disputes of philosophical sects, mocks their rivalries and their systems and brands the hypocrisy of the pretended teachers of morals. But it is especially his attacks against religions which continue to excite interest. In pamphlets such as the *Dialogues of the Gods*, *Zeus Catechized*, *Zeus the Tragedian*, to mention but a few of the best, he ridicules the puerility of the myths which had delighted Greece for so long. Elsewhere, as in the *Alexander the Oracle-monger* and the *Peregrinos*, he assails the false prophets or enthusiasts who impose upon the credulous or unstable. His natural frivolity, it is true, permitted him to

study nothing profoundly. Concerning Christianity, which was then spreading throughout the Roman Empire, he had only the most superficial view. The most enduring value of his work apart from its purely literary merits is that it pictures at first hand the decadence of the Greco-Roman polytheism and the entire spectacle of the society of that time.

MAURICE CROISSET

Works: Lucianus, ed. by Julius Sommerbrodt, 3 vols. (Berlin 1886-99); *The Works of Lucian of Samosata*, tr. by H. W. and F. G. Fowler, 4 vols. (Oxford 1905); *Lucian*, original Greek and translation by A. M. Harmon, Loeb Classical Library, vols. i-iv (London 1913-25).

Consult: Croiset, Maurice, *Essai sur la vie et les oeuvres de Lucien* (Paris 1882); Bernays, Jacob, *Lucian und die Kyniker* (Berlin 1879); Helm, Rudolf, *Lucian und Menipp* (Leipzig 1906); Allinson, F. G., *Lucian, Satirist and Artist*, Our Debt to Greece and Rome, no. viii (Boston 1926); Chapman, John Jay, *Lucian, Plato and Greek Morals* (Boston 1931).

LUCKENBILL, DANIEL DAVID (1881-1927), American Assyriologist. Luckenbill studied at the University of Pennsylvania and the University of Berlin and received his PH.D. degree at the University of Chicago in 1907. From that time until his death he taught Assyrian at the University of Chicago, reaching the rank of professor in 1923. During this period he probably influenced more students of Assyrian than any other teacher in the country. His premature death prevented the publication of much important material and his only published books are *The Annals of Sennacherib* (Chicago 1924), a model for all future publications of historical annals, and *Historical Records of Assyria* (2 vols., Chicago 1926-27), a translation with elaborate commentary of the entire source material for Assyrian history, forming the first two parts of a projected series of "Ancient Records of Assyria and Babylonia." Many of his most important contributions dealing with problems of Babylonian, Assyrian and Hittite history as well as with the influence on the Bible of the Babylonian culture and especially religion are to be found only in periodical articles, particularly in the *American Journal of Semitic Languages and Literatures*. Although Luckenbill possessed a mastery of cuneiform texts and grammar and was widely interested in every problem, his chief desire was to understand the social and particularly the economic life of the ancients. His favorite course dealt with Assyrian and Babylonian economic history; he published and annotated numbers of economic documents and

valuable notes are scattered through his articles. Equally worthy of attention is his collection of Hittite treatises in the *American Journal of Semitic Languages and Literatures* (vol. xxxvii, 1921, p. 161–211). Because of his interest in economic documents which have rarely been translated or even studied by the average Assyriologist he conceived the project of an Assyrian dictionary, where each occurrence of each word in the language should appear on a separate card with full context. The work was begun by the Oriental Institute under his direction and has been continued since his death along the lines he planned. Through the material thus collected it is possible to interpret exactly the technical terminology of economic, administrative and social life. Progress is already far advanced in working out price levels, interest rates, administrative changes and the like for the three thousand years of economic and social life covered by the documents.

A. T. OLMSTEAD

Consult: Waterman, Leroy, and Maynard, John A., in *American Journal of Semitic Languages and Literatures*, vol. xliiv (1927–28) 1–5, and vol. xlv (1928–29) 90–93.

LUCRETIUS CARUS, TITUS (96?–55 B.C.), Roman poet and the greatest of the Roman Epicureans. Animated by a genuine feeling for nature (*Venus alma genetrix*) and by an enthusiasm for Epicurus as the liberator of minds obsessed with religious superstitions, fear of divine ire and horrible fantasies of the world beyond, Lucretius was the true poet of Epicureanism and in *De rerum natura* gave the doctrine of the Greek master a stupendous artistic quality.

In the first and second books the poem traces the naturalistic conception of the universe according to atomism, applying, in the third, this conception to the relations between the soul and body; in the fourth to the refutation of the belief in a world beyond and immortality; in the fifth to cosmogony and the genesis of life, human society, language and civilization; and in the sixth to the explanation of the natural fearful phenomena, such as tempests, earthquakes and volcanoes. An exposition of Epicurean ethics, which the Roman Epicureans developed with great detail in connection with their theory of friendship, is lacking.

Of great importance for the history of sociological theory is the genetic theory of society and of human progress which Lucretius develops in the fifth book. The theory, which is similar to that expounded (also on an Epicurean base) in

the works of Diodorus Siculus and Diogenes of Oenoanda, holds that men were naturally stimulated through the experience of danger and misfortune to advance from their primordial savage life. It is also from natural experience that they received the suggestions for their first discoveries, such as fire, the smelting of metals, the arts and agriculture. These experiences awakened reflection; innate insatiability impelled humanity to progressive development. Need, experience, the sense of utility, the impulsion of the mind, time, all operating gradually and continuously, are the artisans of all progress, creating and developing society and justice, the family and affections, language and civilization. Echoes of these theories are found in the pages of Vergil, Horace and Vitruvius; these writers kindled the enthusiasm of the men of the Renaissance, who passed on the influence of Lucretius into modern times.

RODOLFO MONDOLFO

Works: *De rerum natura*, ed. with an English translation by H. A. J. Munro, 3 vols. (4th rev. ed., London 1920–28).

Consult: Alfieri, V. E., *Lucrezio* (Florence 1929); Masson, John, *Lucretius, Epicurean and Poet*, 2 vols. (New York 1907–09); Martha, C., *Le poème de Lucrèce* (8th ed. Paris 1913); Bruns, I., *Lucrez Studien* (Freiburg i. Br. 1884); Giussani, C., *Studi lucreziani* (Turin 1896); Pascal, C., *Studi critici sul poema di Lucrezio* (Rome 1903); Mahoudeau, P. G., "Lucrèce transformiste et précurseur de l'anthropologie pré-historique" in *Revue anthropologique*, vol. xxx (1920) 165–76; Delvaile, J., *Essai sur l'histoire de l'idée de progrès* (Paris 1910) ch. v.

LUDEN, HEINRICH (1780–1847), German historian and publicist. Luden was born in the principality of Hanover and studied theology at the University of Göttingen. Under the stimulus of Johannes von Müller he turned to the study of history and in 1806 he began teaching at the University of Jena, where he remained until his death.

Luden is one of the most outstanding examples of a scholar who subordinated his entire scientific work to the practical needs of the day. His whole activity was animated by a spirit of national patriotism. As a publicist he edited the *Nemesis* from 1814 to 1818, the *Deutsche Blätter* from 1815 to 1816 and the *Allgemeines Staatsverfassungs-Archiv* from 1816 to 1817. He used these journals first to combat the rule of Napoleon and then to propagate his ideas of German unification along liberal-constitutional lines. His greatest influence was exercised as a teacher at Jena, where he inspired his students with a political

sense of national freedom and unity. He was also largely instrumental in the creation and spread of the *Burschenschaft* movement. Foreign students gathered around him, and his influence came to be particularly associated with the Czech national movement under Palacký. Luden's historical writings were out of date when they appeared and were not based on modern scientific criticism, but they served as a means for stirring up the people and as a tool for the unification movement. His philosophy of history was influenced by the idealist thought of Fichte and Schelling and in a sense he is a forerunner of the national political school of historians of later day Prussia.

In his economic views Luden was a critic of the individualist economics of Adam Smith. He laid more stress on ethical principles and pointed out the automatization and loss of human dignity produced by increased division of labor. In his criticism of economic conditions he was under the influence of Fichte and in his constructive suggestions he was inspired by the spirit of the old *Polizeistaat* (welfare state).

FRANZ SCHNABEL

Important works: *Handbuch der Staatsweisheit oder der Politik* (Jena 1811); *Kleine Aufsätze*, 2 vols. (Göttingen 1807-08); *Allgemeine Geschichte der Völker und Staaten des Altertums* (Jena 1814, 3rd ed. 1824); *Allgemeine Geschichte der Völker und Staaten des Mittelalters*, 3 vols. (Jena 1821-22; 2nd ed., 2 vols., 1824); *Geschichte des deutschen Volkes*, 12 vols. (Gotha 1825-37); *Geschichte der Deutschen*, 3 vols. (Jena 1842-43).

Consult: Luden, H., *Rückblick in mein Leben* (Jena 1847); Haage, J., *Heinrich Luden, seine Persönlichkeit und seine Geschichtsauffassung* (Taura 1930); Schäfer, D., in *Preussische Jahrbücher*, vol. xlv (1880) 379-400; Reissig, E., "Heinrich Luden als Publizist und Politiker" in *Verein für thüringische Geschichte und Altertumskunde, Zeitschrift*, n.s., vol. xxiii (1916-18) 205-346, and vol. xxiv (1919-20) 54-88, 227-307; Ehrentreich, Hans, "Heinrich Luden und sein Einfluss auf die Burschenschaft" in *Quellen und Darstellungen zur Geschichte der Burschenschaft und der deutschen Einheitsbewegung*, vol. iv (1913) 48-129; Herrmann, F., *Die Geschichtsauffassung Heinrich Ludens im Lichte der gleichzeitigen geschichtsphilosophischen Strömungen* (Leipzig 1904); Pfitzner, J., "Heinrich Luden und František Palacký" in *Historische Zeitschrift*, vol. cxli (1929) 54-96; Brown, W. E., "Heinrich Luden: a Pioneer of Nationalism" in *Contemporary Review*, vol. cxl (1931) 231-38; Mombert, P., *Geschichte der Nationalökonomie* (Jena 1927) p. 274-76.

LUDLOW, JOHN MALCOLM (1821-1911), British social reformer. Ludlow was born in India and educated in Paris, which was then the center of democratic ideas. He went to London

in 1838 and was called to the bar in 1843. An intimate friendship with J. F. D. Maurice and Charles Kingsley began in 1848 and with them he started the Christian Socialist movement through the magazine *Politics for the People*, of which he wrote nearly half the contents. In 1849 on a visit to Paris he studied Buchez' *associations ouvrières* and in 1850 persuaded his friends to initiate cooperative production. He planned the constitution of the movement and of its shops, and although E. V. Neale and others soon linked the work with the cooperative stores at Rochdale, Ludlow always maintained that production rather than distribution is the true starting point in any large reform of society. His full scheme was similar to that recently revived as guild socialism. As a lawyer he was able to render real service by the preparation of supporting evidence in promoting the Industrial and Provident Societies Act, which in 1852 gave legal status to cooperative societies; he followed this with other legal activities. In 1854 when his associations began to fail he threw himself into the foundation of the Working Men's College, of which Maurice was the first principal. He was made secretary in 1870 to the Royal Commission on the Friendly Societies and in 1875 became their registrar. In this capacity he was until 1891 the chief link between the government and the whole labor movement and exerted a great though anonymous influence upon the latter's development.

Ludlow was a gifted writer but not a great speaker; his knowledge of France gave him a sympathy with democracy almost unique in his generation; his energy and single mindedness made him the wisest of counselors. To no one does the progressive movement in Britain owe a larger debt. That he has never received proper recognition is due partly to his modesty, partly to his length of days. He always insisted on giving credit for his work to others; he kept studiously in the background and outlived all his contemporaries, so that on his death there was none left to do him honor. The secret of his influence was his combination of knowledge with energy and persistence and his deep and reasonable religious faith. Here he drew inspiration from Maurice; in practical and social matters he was Maurice's guide and adviser.

CHARLES E. RAVEN

Consult: *Christian Social Reformers of the Nineteenth Century*, ed. by Hugh Martin (London 1927) p. 143-62; Raven, Charles E., *Christian Socialism 1848-54* (London 1920).

LUDOGOVSKY, ALEXEY PETROVICH (1840-82), Russian agronomist. Ludogovsky studied and taught at the Gorigoretsky Agricultural Institute, where he continued as docent upon its removal to St. Petersburg in 1868. Shortly thereafter he was appointed professor at the newly created Petrovosko-Razumovskaya Agricultural Academy at Moscow.

The span of Ludogovsky's career coincided with the period of great reforms in Russia, of which the emancipation of the peasants in 1861 was the leading one. At this time questions of economic and technical organization of agriculture assumed unusual importance for the country. As a scientific investigator and teacher at a specialized agricultural college Ludogovsky exerted a direct and far reaching influence in this field. Students trained by him went out to all sections of the country as managers of estates and as technical advisers to zemstvo and other local government bodies. And his great work, *Osnovi selskokhozyaystvennoy ekonomii i selskokhozyaystvennogo schetovodstva* (Fundamentals of agricultural economics and farm accounting, St. Petersburg 1875), was the first advanced study of the subject which not only dealt with the technique and management of farming but also afforded a comparative view of economic and social conditions governing the variety of agricultural forms and systems in different countries throughout history. This socio-economic point of view characterized the subsequent development of agricultural economics in Russia as distinguished from farm management and technical agronomy in western Europe. The book itself was used by several generations of Russian agronomists even when the natural scientific views expounded therein became somewhat outmoded. Ludogovsky may justly be considered one of the founders of agricultural economics in Russia.

W. KOSSINSKY

Consult: Schirkovitch, J., "Ideengeschichte der Agrarwissenschaft in Russland" in *Weltwirtschaftliches Archiv*, vol. xxvii (1928) 104-252.

LUEDER, AUGUST FERDINAND (1760-1819), German philosopher and economist. Leuder was born in Bielefeld, Prussia. In 1786 he became professor of history at Brunswick, in 1810 professor of philosophy and history at Göttingen and in 1817 professor at Jena. He early acquired a comprehensive knowledge of the historical and geographico-statistical literature of his time, and his early works were confined

chiefly to translations of accounts of travels and of newly published ethnological works. His study of contemporary foreign writers appears to have led him to political economy. At a time when German university scholarship still held fast to the doctrines of mercantilism Lueder became with Sartorius in Göttingen and C. J. Kraus in Königsberg one of the first to represent the ideas of liberalism in Germany. His chief work in economics, *Über Nationalindustrie und Staatswirtschaft* (3 vols., Berlin 1800-04), was an elaboration of the doctrines of Adam Smith, which he illustrated with numerous examples from history and ethnography. He deviated from Smith, however, in that he emphasized the subjective nature of value and laid more stress on the significance of intellectual and moral factors in the economic development of a nation. His effective exposition of the detriments of slavery and serfdom is noteworthy. In *Über der Veredelung der Menschen, besonders der Juden* (Brunswick 1808) he warmly pleads for the emancipation of the Jews.

Lueder won a permanent place in the development of the social sciences in Germany by his *Kritik der Statistik und Politik* (Göttingen 1812) and *Kritische Geschichte der Statistik* (Göttingen 1817). At a time when *Staatskunde*, or statistics, was universally esteemed as a reliable guide to political action Lueder exposed the limited significance of statistical observations. Statistics inevitably ignores the intellectual and moral forces in society which do not lend themselves to quantitative treatment. He bitterly opposed the contemporary practise of making statistics serve the political ends of governments. Although his charges were exaggerated they were productive of beneficial results to the extent that they contributed to the cessation of government interference in German statistics.

KARL PRIBRAM

Consult: Hasek, Carl W., *The Introduction of Adam Smith's Doctrine into Germany*, Columbia University, Studies in History, Economics and Public Law, vol. cxvii, no. 2 (New York 1925) p. 78-84; Roscher, W., *Geschichte der Nationalökonomik in Deutschland* (Munich 1878) p. 619-24; Saalfeld, Friedrich, *Geschichte der Universität Göttingen* (Hanover 1820) p. 122; John, V., *Geschichte der Statistik* (Stuttgart 1884) p. 133-40; Westergaard, H. L., and Nybølle, H. C. J., *Statistikens teori i grundrids* (3rd ed. Copenhagen 1927), tr. into German by M. Iversen as *Grundzüge der Theorie der Statistik* (2nd ed. Jena 1928) p. 20.

LUEGER, KARL (1844-1910), Austrian politician. Lueger, who came of a family of Viennese petty bourgeoisie, was trained as a lawyer

and began public life as a liberal. In 1875 he was elected to the City Council and in 1885 to the Austrian Parliament. His liberalism had an anti-capitalist tinge reflecting the bitterness of his class against Viennese Jewry, whose role in the upper strata of capitalist society was quite out of proportion to its numbers. While maintaining friendly personal relations with Jews, Lueger became a violent antisemitic agitator. He founded and led the Christian Socialist party, which united Catholic conservatives, prosperous peasants and disgruntled small tradesmen on a religious, antisemitic, reformist platform and included numbers of workers inflamed by antisemitism. The defeat of the bourgeois liberal majority, with its strong Jewish backing, in the City Council, was largely due to Lueger's energetic leadership and brilliant oratory. Refused confirmation by the government four times, he became mayor of Vienna in 1897 on his fifth election. Although his plan of liberal reform of the empire's communal law failed, his administration of Vienna proved him to be more than a mere orator. Reorganizing the city economy on municipal socialist lines he succeeded in a few years in municipalizing the gas, water and street car systems, in surrounding Vienna with a belt of meadow and forest closed to building speculation and in introducing numerous measures of social reform. Definitely anti-Magyar in politics, he favored a united monarchy and cooperated with the house of Hapsburg as a loyal oppositionist; his party became the main bulwark of imperial conservatism. After being a storm center for years he became a popular national figure, regarded as the advocate of sound human understanding. Witty, undoctinaire, good tempered, inconsistent, his personality and career were characteristic of the Vienna of his day.

THEODOR HEUSS

Consult: Connolly, P. J., "Karl Lueger" in *Studies*, vol. iii (1914) 280-91, and vol. iv (1915) 226-49; Harden, Maximilian, *Köpfe*, 4 vols. (new ed. Berlin 1923-24), tr. as *Monarchs and Men* (Philadelphia 1913) p. 269-86; Jászi, Oscar, *The Dissolution of the Habsburg Monarchy* (Chicago 1929); Kralik, Richard, *Karl Lueger und der christliche Sozialismus* (Vienna 1923).

LULL, RAMÓN (c. 1232-1315), Spanish missionary and philosopher. Lull, who was born in Majorca shortly after its reconquest from the Moslems, abandoned a courtier's life in order to help accomplish the universal dominance of Christianity, the single aim of his complicated ideology. While this included the liberation of

the Holy Land, his methods of combating Islam contrast markedly with the warlike crusading of his time; he learned Arabic and devoted himself to a thorough study of the Moslem books and doctrines. He was a constant advocate of this type of special preparation for proselytizing, the modernity of which impresses present day missionaries. In the end he adopted certain Islamic ideas and practises; Ribera and Asín Palacios have demonstrated that he was a Christian Sufi indebted especially to the Murcian mystic, Muḥiy-al-Dīn ibn-'Arabi. Lull addressed himself to the people, utilizing allegories, apologues and even graphic representations; by extensive use of the vernacular he made Catalan the first modern tongue to become the instrument of philosophy. He taught at the University of Paris and traveled extensively in Mediterranean lands, propagating his ideas or engaging in direct missionary activity.

Lull's philosophic works, which he believed were written by divine inspiration, display the characteristics of scholasticism and mediaeval science. While many of his ideas were perhaps unrealizable, the social, educational, ecclesiastical and political reforms which he advocated were on the whole not those of a fanatic. They were based on general mediaeval, Catalan and even Moslem institutions with which he was familiar, and which he sought to infuse with a Christian spirit. According to Menéndez y Pelayo, in his utopian novel *Blanquerna* (c. 1283; tr. by E. A. Peers, London 1926) Lull displays a greater practical sense than Plato, More, Campanella and other creators of ideal commonwealths: the hero becomes pope, reforms the college of cardinals in accordance with a Sufi institution and makes the papacy the instrument of universal reform and missionary activity. In the *Libre de cavayleria* (c. 1276-86; tr. by W. Caxton as *Book of the Order of Chivalry*, new ed. by A. Byles, London 1926), widely popular in the later Middle Ages, Lull finds the origin of chivalry in a species of social compact and its object in the maintenance of justice. *Liber de gentili et tribus sapientibus*, also very popular, was modeled apparently on the *Kuzari* of Jehuda Halevi in its search for the true religion through the arguments of representatives of Judaism, Christianity and Islam. While this work displays a remarkable spirit of tolerance for its age, Lull was not consistent in his deprecation of the use of force to propagate Christianity.

As author and translator he helped transmit Moslem culture to Europe; he also founded a

short lived monastery for the study of Arabic. In 1311, apparently through his influence, the Council of Vienne ordered that oriental languages be taught in several of the universities. Although his philosophic doctrines were suspected of heresy they were taught for centuries; and while their adherents have been relatively few in recent times, some have sought to make Lull the national philosopher of Catalonia. He is revered as the patriarch of Catalonian literature.

ANGEL GONZÁLEZ PALENCIA

Works: *Opera omnia*, ed. by Yvon Salziner, 8 vols. (Mainz 1721-42); *Obras completas*, ed. by J. Rossello and M. Obrador y Benassar, vols. i-xiv (Palma di Majorca 1901-28).

Consult: Peers, E. A., *Ramon Lull* (London 1929); *Histoire littéraire de la France*, vol. xxix (Paris 1885) p. 1-386; Probst, J. H., *Caractère et origine des idées du bienheureux Raymond Lulle* (Toulouse 1912); Ribera, Julián, "Orígenes de la filosofía de Raimundo Lullio" in *Homenaje a Menéndez y Pelayo*, 2 vols. (Madrid 1899) vol. ii, p. 191-216; Gottron, Adam, *Ramon Lulls Kreuzzugsidées*, Abhandlungen zur mittleren und neueren Geschichte, vol. xxxix (Berlin 1912); Altaner, Berthold, "Glaubenszwang und Glaubensfreiheit in der Missionstheorie des Raymundus Lullus" in *Historisches Jahrbuch*, vol. xlviii (1928) 586-610; Menéndez y Pelayo, M., *Orígenes de la novela*, 4 vols. (Madrid 1905-15) vol. i, p. lxxii-lxxxvi; Pastre, Lluís, "La pedagogia de Ramón Lull" in *Quaderns d'estudi*, any ii, vol. ii (1916-17) 190-203; Asín Palacios, M., "El lulismo exagerado" in *Cultura española*, vol. i (1906) 533-41.

LUMBER INDUSTRY See WOOD INDUSTRIES.

LUSCHAN, FELIX VON (1854-1924), German anthropologist. Von Luschan did important work in linguistics, archaeology, physical anthropology and technology, displaying great erudition and industry. He began anthropometric field work in Lycia in 1881 and for the next thirty years collected data bearing on the natural history of man in western Asia. He measured the cephalic indices of over 1200 Jews and found their range to be from 65 to 98—a range as wide as that of the human race. This and other data adduced by him enabled him to prove incisively that the concept of a Jewish race was erroneous. By his studies in 1889 and 1890 on the inheritance of the cephalic index in Greek families of Adalia he showed that religion tends to isolate and perpetuate a physical type by demanding inbreeding and that a homogeneous type is frequently found in isolated remote mountain communities. He believed the original historic inhabitants of western Asia to have been a homogeneous melanochroid race with extremely broad

heads and with "Hittite," or beaked, noses; the Kurds, however, he regarded as a Nordic race which had maintained its purity for more than thirty centuries. In his Huxley memorial lecture in 1911 he stressed the fact that "language, religion, nationality, and race are quite distinct conceptions . . . again and again confounded by the general public and by the press."

In 1918 von Luschan published his important paper on historical contacts and convergence, with illustrations from many phases of culture, particularly from the field of technology. His conclusion was that similarities in culture are in some cases explicable in terms of historical contacts or divergences, in others by convergence. He maintained that the Egyptians had acquired knowledge of ironworking from Negro tribes rather than vice versa.

WILSON D. WALLIS

Important works: "Die anthropologische Stellung der Juden" in *Korrespondenz-Blatt*, Deutsche Gesellschaft für Anthropologie, Ethnologie und Urgeschichte, vol. xxiii (1892) 94-100; "Rassen und Völker" in *Weltgeschichte*, ed. by J. von Pflugk-Harttung, vol. i (Berlin 1909) p. 39-79; "The Early Inhabitants of Western Asia" in Royal Anthropological Institute, *Journal*, vol. xli (1911) 221-44; *Entstehung und Herkunft der ionischen Säule*, *Der alte Orient*, vol. xiii, pt. iv (Leipzig 1912); *Kriegsgefangene, ein Beitrag zur Völkerkunde im Weltkrieg* (Berlin 1917); "Zusammenhänge und Konvergenz" in Anthropologische Gesellschaft in Wien, *Mitteilungen*, vol. xlviii-xlix (1918-19) 1-117; *Völker, Rassen, Sprachen* (Berlin 1922, new ed. 1927).

Consult: Virchow, Hans, in *Zeitschrift für Ethnologie*, vol. lvi (1924) 112-17; Wissler, Clark, "Felix von Luschan and His Collections" in *Natural History*, vol. xxvi (1926) 650-51.

LUTHER, MARTIN (1483-1546), German religious reformer. The Reformation of Martin Luther led not only to a religious but also to a social revolution of the greatest significance and the most far reaching consequences, but these results lay entirely outside the original intent of the reformer. Luther did not proceed from a criticism of the external faults of the Catholic church and of the society governed by it (as did Wycliffe, Huss and other precursors) but exclusively from questions of the wholly personal religious experience. He was a monk, and the agonizing quest for divine grace which brought forth his new religious ideas may best be understood as a fruit of monasticism. Not the conquest and mastery of the world by Christianity, not the transformation of its culture and society by the Christian idea, not the organization of a powerful world church, is the essential intention of this monastic ascetic, but the reconciliation of

the individual soul with its God. From this arises a religious ethics of the individual which it is very difficult to broaden into a social ethics. If the question always remains only that of gaining the right emotional attitude of the individual believer to God, then the social world about us becomes proportionately unimportant. Luther recognized the world order as ordained by God or at least as enjoying His sufferance. It was therefore God's command to adapt one's self to the given conditions and acquiesce in them, only taking pains to preserve within this world order all the Christian virtues. From this doctrine arises a strong political conservatism which enjoins on the subject unconditional allegiance even toward an unjust and impious ruler, which forbids the serf to desert his master even if he be a Turk and the German peasant to revolt against his hard and unjust bailiff. In the German Peasants' War of 1524-25, it is true, Luther at first preached conciliation to both sides but then with merciless severity opposed the rebellion. His works reveal no mention of ideas of social reform. As a son of a peasant he shared the traditional economic and social views of his time concerning agriculture, industry, trade and business. His social and political views were essentially patriarchal in character. Every man is placed in his class according to his calling and must remain there; the family is the most important constituent of the state order, and the state is a sort of great family in which the Christian fathers care for their subjects as the father of a family looks after the welfare of his group.

Luther, however, was always far more than a monastic ascetic, allowing himself to drift in the world with no attempt at improving it. He looked for nothing, it is true, from external arrangements and nothing from ecclesiastical institutions, least of all from the political power of a hierarchically composed church of priests. He annihilated this church of priests and proclaimed the universal priesthood of the faithful. But despite his individualistic principles he immediately established a new territorial church. He became, despite the narrow political situation in which his church found itself engaged, a national educator in the grandest style. With the holy zeal of a prophet he set about to convert the character of mankind. This conversion should be accomplished by the "word of God," the preaching of which he felt to be his professional duty as "minister of souls" and professor. The word of God, however, involved moral demands which Luther proclaimed to the

conscience of men with full and outspoken force; absolute love in the sense of Jesus' Sermon on the Mount in place of self-seeking; and absolute, boundless confidence in God in place of self-confidence. Here Luther knows no evasion, no compromise. He knows nothing of abatement or shading off of the command to love in order to adapt it to the various earthly callings, as did the mediaeval church; nothing of a compromise between natural requirements of human importance and authority and the command of exclusive confidence in God, like the Christian humanism of an Erasmus; nothing of "natural" moral dignity and ability of mankind; nothing of a moral gradation of the various classes and professions. Even the state, or rather the ruling power, is for him simply a profession like any other, and he does not propose to withdraw his moral demands before the sphere of politics. The command of boundless love of God and of one's neighbor is no longer to be fulfilled outside the world as in the old monasticism but within the world in the daily callings of natural men; but in this it is to lose nothing of the absoluteness of its claim to importance. No earthly demands for happiness, no considerations of social or political interests, are of any importance whatsoever as against this rigorousness of duty.

Calvin starting out from similar religious ideas sought to realize this moral ideal by means of ecclesiastical dispositions, by means of the separation of a community of saints from the world and the preservation of their purity as a class with the aid of church discipline. Luther does not believe in the possibility of separating clearly from each other true and false Christians, the "chosen" and the "rejected." He knows that true Christians are few and will always be few and that Christian princes will be fewest of all. A devout prince, he says, is "rare game in Heaven." Sober and without illusions he looks at the world as it really is. It is as a whole like the heart of every individual Christian the scene of an eternal, ever seething struggle between God and the devil. But that does not discourage him. Without hoping ever to conquer the world as a whole for God or even to be able merely to rescue individual Christians definitely from the temptation of evil he takes up the struggle over the character of mankind, the struggle for God against Satan. His religion is the religion of a heroic *Willensmensch* who bears about in his own breast the contradictions of good and evil which rend the world asunder. Its greatness has been understood only by a few. Melancthon attenu-

ated it and adapted it to the requirements of natural reason. Its irresolvable internal contradictions have filled the spiritual life of Germany with ever new tensions.

GERHARD RITTER

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LUXEMBURG, ROSA (1870–1919), Polish German socialist and economist. A member of the proletarian party in Poland, Rosa Luxemburg fled from the Russian police to Zurich, where she studied law and economics and became a Marxist. In her doctor's dissertation, the first complete study of Polish industry, she revealed its close ties with the Russian economic structure and the resulting indifference of the Polish bourgeoisie to demands for national independence and demonstrated that the idea of an independent Poland was advocated by reactionary small shopkeepers and the ruined landed nobility. Consequently she advocated Polish autonomy within Russia rather than Polish independence as a working class demand. In opposition to the chauvinistic Polish Socialist party (P.P.S.) she helped found in 1893 the Social Democratic party of Poland and Lithuania as a branch of the Marxian Russian Social Democracy.

In 1896 Rosa Luxemburg settled in Germany,

where she soon became a leading theorist of the Social Democracy. Defending the orthodox position against Bernsteinian revisionism she maintained that capitalism despite outward appearances had entered a period of collapse, of increasing crises, wars and revolutions. The thesis of her principal economic work, *Die Akkumulation des Kapitals*, is as follows: In capitalist economy the contradiction between productive capacity and the possible outlets for products constantly increases. In a pure capitalist society (made up only of capitalists and their dependents on the one hand and of workers on the other) there would not be sufficient outlet for all goods produced; actually a portion of them must be sold to "third persons," i.e. to farmers and artisans within the capitalist country and to countries with primitive methods of production. As a result the antiquated methods are destroyed, the backward countries are annexed to capitalism and the fundamental dilemma of capitalist economy becomes more acute. The impulse to expand and to monopolize markets consequently grows stronger, and imperialism becomes the guiding principle of foreign policy. With the exhaustion of the possibilities of expansion capitalism would reach the limits of its development and existence; in reality, however, it must collapse even earlier as a result of the profound social convulsions which are stimulated by the expansion, and thus revolution must occur, leading to the victory of the working class.

On the basis of this theory Rosa Luxemburg defined as the goal of the working class the acquisition of political power by force and held that all its immediate activities must be related to that end. As a result of her experiences in the revolution of 1905–06, in which she took a leading part in Warsaw, she advocated the general strike as a revolutionary weapon. After 1907, centering her attention on militarism and the war danger, she rejected pacifist ideas as utopian and stressed proletarian mass action as the sole means of eliminating war.

From this time forward she was on the extreme left of the Social Democracy. Although she disagreed with them on organizational questions, holding that the rigid centralization in the Russian party defended by Lenin must give way to a more democratic organization, concerning all other important matters she held the same position as the Russian Bolsheviks. At the International Socialist Congress in Stuttgart in 1907 she and Lenin composed the resolution which demanded a revolutionary struggle for the over-

throw of capitalism in time of war. Immediately after the outbreak of the World War she attacked the patriotic policy of the Social Democracy and with Leo Jogiches, Clara Zetkin, Franz Mehring and Karl Liebknecht founded the Spartakusbund to arouse revolutionary antiwar sentiments in the working class. Except for five months she was in prison from February, 1915, until the end of the war. Nevertheless, she influenced the revolutionary movement, largely through writings which she smuggled out of prison. After the collapse of the empire she called for a proletarian revolution; although she was at first critical of some Bolshevik policies, in the heat of actual struggle she formulated a similar program for Germany and late in 1918 she led in founding the German Communist party. After the defeat of the Berlin workers' rising (*Spartakuswoche*), in which although she regarded it as premature she played a leading and daring role, she was arrested at the order of the Ebert government; on January 15, 1919, together with Karl Liebknecht, she was assassinated by the White soldiers in whose custody she had been placed.

PAUL FRÖLICH

Important works: *Die industrielle Entwicklung Polens* (Leipzig 1898); *Sozialreform oder Revolution?* (Leipzig 1899, 2nd ed. 1908); *Massenstreik, Partei und Gewerkschaften* (Hamburg 1906, 3rd ed. Leipzig 1919); *Die Akkumulation des Kapitals* (Berlin 1913); *Die Krise der Sozialdemokratie*, first published under pseudonym "Junius" (Berne 1916), English translation (New York 1918); *Die russische Revolution*, ed. by Paul Levi (Berlin 1922); *Briefe aus dem Gefängnis*, Internationale Jugendbibliothek, no. x (3rd ed. Berlin 1922); *Briefe an Karl und Luise Kautsky*, ed. by L. Kautsky (Berlin 1923), tr. by L. P. Lochner (New York 1925). Of her collected works edited by Clara Zetkin and Adolf Warski volumes iii, iv, and vi (Berlin 1923-28) have appeared so far.

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LUXURY. The concept of luxury, viewed as an excess of natural consumption or of money expenditure hedonistically desirable but morally somehow objectionable, seems to contain as its rational basis two elements from which both its historical account and its theoretical analysis must start. One, and the more relativistic, is the comparative degree of consumption and spending, not so much as between individuals as within the pyramid of social income strata and

corresponding standards of living—comparative both from the point of view of one period and from that of historical development. The second element is not thus subjective but centers on the relation of certain methods and quantities of expenditure—i.e. of the consumptive use of the national income as divided among social classes—to the methods and quantities of productive services required to guarantee that "national dividend" as the fund for individual or class expenditure.

The first economic formulation of the luxury concept appears in a naïve way to be based entirely on the former comparison, that between different periods or groups of expenditure. The taxation of the objects or procedures of luxurious consumption has aimed at two purposes, on the surface contradictory: the suppressing or limiting of this consumption and the deriving of a public income from it. (A similar contradiction occurs in public finance between protective and fiscal customs duties.) On closer inspection a good deal of this contradiction vanishes, when it is seen that prohibition and taxation of luxury tend equally to fix certain levels and standards of living, as against economic and social progress, which is tending to "level" such differences. The mediaeval prohibition or taxation of luxury, e.g. in clothing or food, in one group of society, coupled with permission and freedom from taxation in another, is of course economically equivalent to mere prohibition or taxation regardless of group distinctions in later societies stratified chiefly according to money incomes, because there the money economy alone enables the groups higher up in the pyramid to bear the burden of taxation or to evade the prohibition.

Luxury as an economic concept might thus seem to be resolved into a mere corollary of social stratification, the weapon with which "upper classes" constantly try to fix existing differential expenditures (and thereby indirectly divisions) of income or at least to slow down the rate of social imitation of "lower classes." Although a very important aspect of the luxury problem, this view by no means furnishes a complete analysis. First of all, the social structure of "demand" as the basis both of the expenditure (and saving) and to a large extent also, through cultural minimum concepts, of the production of national and class income can hardly be taken as the mechanical addition of "higher" to "lower" wants and satisfactions—an assumption characteristic of many doctrines of value inspired by utilitarian or hedonistic concepts of

"progress." Although social innovations to us inseparable from "civilization," such as the handkerchief, the toothbrush or the bathtub, are apt to be regarded as typical of the way this progress has of converting luxuries into necessities, it would scarcely be justifiable to argue further either that corresponding wants before the emergence of those innovations had not been satisfied at all or that these were a priori the only means of their satisfaction.

Thinking in systems and cycles instead of in simple progressive lines is as necessary in the study of the phenomena of luxury as in all other departments of the social sciences. Fashion is now definitely understood as a cycle of variations from long term trends of custom. In the same way luxury embodied in particular objects and practises must be taken to follow lines of descent as well as ascent. An example of an especially long term trend is the quantitative luxury of food characteristic of "natural" economies unable to cope with their surplus in kind, such as those of the decadent periods of the ancient world and even more of the late mediæval and early modern centuries. Both the wide range and the economic and social conditioning of variations in the definition of luxury are brought out by a comparison of such periods with the precarious feeding of many primitive or stabilized civilizations and, on the other hand, with the declining taste for even qualitatively luxurious food and cooking exhibited by the modern mechanized mass society.

One might again try to establish a law of cyclical variation of luxury ideals with regard also to different social groups or classes. As yesterday's fashion of a higher or more developed (e.g. urban) group may become today's fashion of a lower or less developed (e.g. rural) group, so it may be with luxuries. Food luxury certainly lingers in rural surroundings long after it has ceased to be the ambition of urban populations, and in a very similar line of development or rotation the hoarding or even wearing of luxurious durable textiles is making room for rapid changes of quickly outworn materials and patterns. It is important, however, not to see these developments in a too rigidly irreversible outline. As it is a mistake to consider the old regional dresses (*Volkstrachten*) of Europe as nothing but the petrified remains of older aristocratic or urban dresses, so it would be fallacious to think of luxuries as ever spreading universally or as descending the social ladder until the day of the "classless society" and anticipat-

ing the latter's regardlessness of historical or geographical diversities.

The subjective and relativistic analysis of luxury becomes capable of a more objective turn with the posing of the questions: How does luxurious expenditure in certain fields or a general tendency toward it affect the national dividend, first directly through the spending and saving of the income of various groups and then indirectly through the increase or diminution of productive work or service of all kinds as the equivalent of all incomes? From either point of view luxury may be approved or condemned along familiar lines of economic reasoning. Societies seem instinctively to dread luxury as an instrument capable of tapping the roots both of conservation and of progress, menacing on the one hand, through overspending, the necessary investment funds for replacement and enlargement of real capital and on the other, through decadence, the springs of economic and social activity. The strongest and most consequential outbreak of such awareness in history has doubtless been that manifested in the ascetic frame of mind which accompanied the early rise of capitalism in modern Europe and more particularly in the famous spirit of Puritanism. In classical antiquity it had appeared most explicitly in the stoic philosophy. In most of the earlier and in a large part of the later writing on luxury there has been a confusion of ethical and economic considerations. In economic theory criticism of the role of luxury has been most impressively expressed by Alfred Marshall, whose distinction between "artificial" wants and wants creative of new activities is basic to the whole structure of his principles.

Opposite and quite as familiar views have emphasized, especially since the origin of modern economic theory in the early capitalistic age, the importance of luxury consumption—as centering, for example, in the courts of the sovereign princes and the households of their titled and bourgeois imitators—in "bringing money among the people"; not only maintaining the traditional handicrafts and manufactures serving this consumption but also giving rise to many new industries either imported from abroad or developed autonomously. The social and economic aspects of luxury production were widely discussed by most of the social philosophers and social scientists of the eighteenth century. Mandeville's *Fable of the Bees* presented in allegorical form the argument that luxury production is a source of work. David Hume pointed

out the social benefit of luxury production, while the physiocrats analyzed its effects on the national economy. The mercantilistic doctrine of the balance of trade has often been interpreted as hostile to the rise of luxury trades. On the contrary, it was averse only to the importation of foreign made luxuries; and in each country adherents of the doctrine sought to foster their domestic fabrication especially for foreign markets even by means of the importation of foreign artisans and entrepreneurs, practically the only form of capital migration known to that period. It is true that mercantilistic teaching sometimes includes an inveighing against luxury without distinction between foreign and domestic products, notably in the case of the "colonial" beverages and foodstuffs so important in the age of colonial rivalry. But fundamentally this is nothing but a crude theoretical reformulation of the mediaeval ethics of consumption according to "estates." Instead of (or as well as) being morally illicit, certain standards of living are reserved to some classes and prohibited for others, because it is felt that in the case of the latter they would disturb the balance of the social economy by destroying habits of industriousness and promoting supply prices of labor disruptive of the wages market.

There can be on the whole no question as to how deeply the industrial progress of early capitalism was indebted to the ever increasing and diversified demand for luxuries, chiefly in dress but also in all spheres of an artistic style of life, exercised by the old feudal and the new moneyed aristocracy. The rise in importance of the lower middle classes in America and Europe after the World War appears to be in many respects a parallel economic phenomenon. The development of what have been called the "new industries," such as motor cars, artificial silk, cosmetics, cinema, radio and other electric machinery, together with the substitution for coarser cereal foods of daintier vegetables and animal products represents a new turning point in the mutual adjustment of technically advancing production and socially enlarged consumption, in the evaluation of which the millions of unemployed reduced to starvation are not to be forgotten. This process has already created for its own theoretical justification an economic doctrine, that of the beneficial purchasing power of high and rising wages and the corresponding dangers of saving, which has not incorrectly been likened to the early capitalistic doctrine of the usefulness of upper class luxury. The only conditions under

which either theory can hold good are also the same: first, the preservation or adaptation of the equilibrium between purchasing power created in different places or turned to new uses and the rest of the system of productive and consumptive processes forming the national economy; and, secondly, as a long time consideration the prevention of disturbances or the compensation for losses arising from the relative waste or over-refinement inseparable from luxury. As the usefulness of early capitalistic luxury was combated by the English "industrialist" economists, so the extravagance of many modern governments in incurring and encouraging expenditure for "social" purposes has begun to be severely criticized. With the older controversy still unsettled, a new epoch seems to put modern civilization before the alternative either of clinging to the capitalistic system with higher although less equalized standards of living or of embarking on a communistic planned economy with a primarily equalized although possibly very low standard.

Economic theories of both the supply of and the demand for luxury goods are bound to reflect the circumstances and attitudes implicit in the economic background of their respective periods. Both the producers of luxuries and the governments singling them out for a moderate special taxation naturally assume at first a limited but rather inelastic demand for such goods, such as that actually represented by the upper classes of a feudal society. Next governments and after them producers become aware of a growing elasticity and restiveness of a luxury demand which is on the one side harassed by taxes and on the other served by supply at decreasing costs, a condition which tends to eliminate the stimulus of rarity so indispensable to the concepts of fashion, luxury and even of value in general. It was at about this stage in the economic process that Alfred Marshall depicted the artificial wants of the rich as highly inelastic except where the craving for social distinction, growing stronger than any direct gratification of taste, makes them "almost insatiable," while the demand of the middle classes shows considerable responsiveness to rising or falling prices of "moderately expensive" luxuries and the laboring class is condemned to inelasticity at the other end of the curve. Since Marshall's time the rise of just this last class has changed conditions to a degree resulting in the introduction of the term mass luxuries (for the products of the new industries) into the terminology of the

theory of consumption. The term reflects the fact that the demand for these products has hitherto betrayed (e.g. in the ratio of expenditure to saving) something like the positive inelasticity by which Marshall defined the luxury expenditure of the upper classes. The advocates of this new mass luxury consumption can rely on an argument hardly available to the defenders of upper class luxury except in the light of an incitement to leadership and enterprise—the contribution of this consumption toward the upkeep of the physical and mental labor resources of society and of its moral and legal balance and stability. Here too the burden of proof is difficult to allot as between this view and the pessimism of those who fear the recurrence of the threat of decadence from any luxury.

One thing should be evident in view of the fact that the theory of luxury forms a special part of the more general theory of consumption. The thoroughly justified stress laid by the advance of "subjective" value theories on the empirical study of demand functions should not blind economists to the more objective conditions ruling both demand and supply of given strata of goods and services, or rather ruling the interaction of this demand and supply. If the study of static demand from price statistics is supplemented, as to longer periods, by the study of dynamic demand from family budget statistics, the latter still have to look for their ultimate explanation to the description and theory of the social and economic change governing the cycle of production and consumption over whole periods or systems. The history of luxury production in its interdependence with luxury consumption will be able to furnish valuable clues in this direction. Is or is not modern industrial and commercial mass production capable of keeping up the artistic and other cultural standards for which the aboriginal "home industry" and handicraft of so many periods and countries have been famous? How far is the proverbial "dictate" of the modern producer and distributor to the consumer encouraging or discouraging new kinds of genuine luxury? Finally, is the quick invention and spread of cheap substitutes for expensive monopolized luxury articles resulting in a mere speeding up of the race after luxurious varieties or in a slow flattening down of the social differences of consumption? The answer of history to these questions will depend in a marked degree upon the general trend of European and American culture, but it will depend also upon the development of their material

resources. To understand this relationship one need only think of the interdependence between luxury and monetary uses of the precious metals; of the constant pressure of the "synthetic" devices of the modern chemical industries on the market of pearls and precious stones; of the reorganization of modern fur production and marketing as a consequence of both the exhaustion of the old colonial areas of production and the introduction of cheaper raw materials through the refined technique of dressing and imitation.

The position of labor in luxury production has been as double edged as the economic and social meaning of luxury itself. In every country there are instances of labor, in some cases of an old domestic standing and training, exploited by middleman and commission systems, which make large profits in luxury markets. On the other hand, there is no lack of luxury industries and handicrafts which have been handed down from generation to generation of the same stock of artisans. Moreover if the production of highest or exceptional qualities of most commodities is considered as a kind of luxury level of industry generally, a regular feature of this level is seen to be the traditional cultivation of élite groups of engineers, designers and workmen, if only under the threat of possible competition, inland or foreign, for their services.

In this connection two far reaching theoretical conclusions must be drawn from the history of luxury. First, all the fine arts are in one respect parts of social luxury consumption and production; and it is only under the stress of the extreme division of labor contingent upon modern civilization that the artist has lost the consciousness of being an artist, and vice versa. The artistic interest, stimulated by the more vain-glorious sides of the capitalistic demand for works of art, has in modern times centered one-sidedly upon the real or fabricated treasures of past ages to the exclusion of much highly qualified contemporary artistic effort, which is as a result coming to be degraded into artistic handicraft or even resulting in an artistic proletariat. The ultimate outcome of this competition between past and present luxury will possibly be decided by the second factor to be mentioned—the role played by governments and other public institutions in the demand for luxury production. Democracy has necessarily turned the expenditure of these institutions, where it transcends the boundaries of the socially useful, to fields like public festivals and recreations instead

of to that display of politically "representative" splendor characteristic of the older monarchies and aristocracies. It remains to be seen whether the huge sums which nevertheless are spent for representative purposes by democratic and even more by communistic governments will add to the subjective character of public luxury the more objective and enduring values which are embodied in the great art of past religions and states.

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See: CONSUMPTION; STANDARDS OF LIVING; SUMP-TUARY LEGISLATION; EXCISE; SALES TAX; ADVERTISING; FASHION.

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LUZZATTI, LUIGI (1841-1927), Italian statesman. Luzzatti, the son of a wealthy Jewish Venetian family, became interested at an early age in the liberal reformist solution of the social problem. Charged with treason by the Austrian government for organizing a mutual aid society among the gondoliers, he fled to Milan, where he taught economics at the technical institute from 1863 to 1866. At this time he published *La diffusione del credito e le banche popolari* (Padua 1863), which marked the beginning of

his lifelong advocacy of people's banks in Italy. In 1866, when the Venetian provinces were freed from Austrian rule, he was appointed to the chair of public law at Padua; he later taught this subject at Rome from 1907 until the end of his life. In 1867 he published *La chiesa e lo stato nel Belgio* (Milan), the first of a long series of essays on religious freedom collected in *Libertà di coscienza e di scienza* (Milan 1909; 2nd rev. ed. as *Dio nella libertà*, Bologna 1926; tr. by A. Arbib-Costa as *God in Freedom*, New York 1930). These as well as specific appeals in favor of Rumanian and Polish Jews and Turkish Armenians won him international fame as a champion of religious toleration and civil equality for national minorities.

As a protégé of Marco Minghetti he was appointed in 1869 secretary general for agriculture, an unusual distinction for a man of twenty-eight. He became a member of Parliament in 1871, as soon as he attained the necessary age, and was continually reelected until 1921, when he was appointed to the Senate. He was minister of finance in four cabinets during the years 1891 to 1906; minister of agriculture, industry and commerce in 1909-10; premier in 1910-11; and minister of finance once more in 1920. A moderate liberal, he promoted a great deal of legislation dealing with industrial accidents, woman and child labor, old age, emigration, housing, vocational training and cooperation. Neither a free trader nor a protectionist, he initiated for Italy a policy of commercial treaties, no fewer than twenty-four of which he negotiated personally; the most important of them was the provisional accord with France which terminated the tariff war in 1898. A novel feature of some of them was a supplement providing for the mutual regulation of labor conditions. As minister of finance Luzzatti was responsible for considerable economies during a critical period of Italian finances and the conversion of the national debt of 8,100,000,000 lire with a reduction in interest from 4 to 3½ percent, an operation which in 1906 he carried out most successfully despite its magnitude.

LUIGI EINAUDI

Works: *Memorie autobiografiche e carteggi*, vol. i- (Bologna 1931-).

Consult: Alessio, Giulio, in *Reale Istituto Veneto di Scienze, Lettere ed Arti, Atti*, vol. lxxxvii (1927-28) pt. i, p. 17-91, containing a bibliography of Luzzatti's works; Gobbi, U., in *Giornale degli economisti*, 4th ser., vol. lxvii (1927) 217-26; Alvarez, A., in *Académie des Sciences Morales et Politiques, Séances et travaux . . . Comptes rendus*, vol. xc (1930) pt. ii, p. 381-408.

LYELL, CHARLES (1797–1875), British geologist. Lyell was born in Scotland but passed most of his childhood in the south of England. At Exeter College, Oxford, he originally prepared for law; but while there he attended Buckland's lectures on geology, and the interest thus awakened in that science was further developed during a vacation tour in Europe. Two years after his admission to the bar Lyell abandoned the legal profession to devote himself to the study of geology, which had at first been merely a hobby but soon became the major concern of his life.

At the very start of his career as a geologist Lyell found himself in the midst of one of the major controversies of science. He was soon aligned with Murchison against the strong group of "catastrophists" led by Buckland and Coneybeare, who relied on the Noachian Deluge and other cataclysms of nature for their explanations of geological phenomena. In 1830, 1832 and 1833 the three volumes of the first edition of Lyell's *Principles of Geology* were published. This work had an immense influence on contemporary thought not so much because it advanced any fundamentally new ideas but because in it so many known facts of geology were analyzed and correlated. For the first time the science was presented in a thoroughly convincing and rational manner, and only those hypotheses which could withstand critical analysis were approved. It was a complete victory for "uniformitarianism," the principle that processes now in operation on the surface of the globe could and did account for all changes that had taken place in the past. This principle, first suggested by Hutton and Playfair, is basic in all modern attitudes toward earth lore and is one of the corner stones in the evolutionary interpretation of the history of life.

Although Lyell recognized the sequence of progressively higher fossil forms in the strata of successive ages he was not favorably inclined toward the idea of evolution. He criticized severely the doctrines of Lamarck, and for many years after the publication of the *Origin of Species* he withheld approval of Darwin's conclusions. Only as the cumulative evidence impressed his analytical mind were his prejudices overcome, and at last in the tenth edition of the *Principles* he announced his conversion to the doctrine of evolution. His acceptance of this devastating doctrine had great weight with his host of followers and contributed largely toward the settlement of the major scientific and philo-

sophical dispute of the third quarter of the nineteenth century.

KIRTLEY F. MATHER

Important works: *Principles of Geology*, 3 vols. (London 1830–33; 12th ed. in 2 vols., 1875); *The Geological Evidences of the Antiquity of Man* (London 1863, 4th ed. 1873).

Consult: *Life, Letters and Journals of Sir Charles Lyell*, ed. by his sister-in-law, Mrs. Lyell, 2 vols. (London 1881); Bonney, T. G., *Charles Lyell and Modern Geology* (London 1901); Zittel, K. A., *Geschichte der Geologie und Paläontologie* (Munich 1899), tr. by M. M. Ogilvie-Gordon (London 1901); Geikie, A., *The Founders of Geology* (2nd ed. London 1905); "Lyell's 'Principles of Geology'" in *Times Literary Supplement* (1930) 173–74.

LYNCHING and "lynch law" are terms now used chiefly to designate a particular form of mob violence as practised in the United States since the middle of the nineteenth century: a vengeful torture and execution of individuals without trial and regardless of the existence of regular courts of law. In a broader sense lynch law is sometimes employed with reference to any form of extralegal action for inflicting corporal punishment; accordingly American lynching is sometimes likened to such historic forms of private or semiprivate administration of criminal justice as the sixteenth and seventeenth century gibbet, or Halifax, law in England, the mythical Jedburgh justice of Scotland, the *Vehmgericht* of mediaeval Germany and the Spanish *santa hermandad*. The origin of the word lynch is not certain. The most commonly accepted explanation is that it derives from the name of Charles Lynch, a Virginia farmer who at the time of the American Revolution headed a small organization formed to try and punish desperadoes, outlaws and also British sympathizers.

Discussions of lynching often begin with a description of such frontier methods of administering justice in America: extralegal proceedings among the early settlers in dealing with horse thieves, wife beaters, Indian scalpers, harborers of runaway slaves and occasionally public officials accused of an abusive exercise of power; the activities in the third quarter of the eighteenth century of self-constituted standing groups, such as the Regulators in the Carolinas, the Regulars in New York and the Rangers in Pennsylvania, formed to visit speedy punishment upon robbers, brigands and loyalists; and the more systematic work in the middle decades of the nineteenth century of vigilance committees of the west in administering justice against

murderers, stock thieves, gamblers and "suspicious characters" in regions where the spread and increase of population kept ahead of the establishment of civil institutions.

It is only in a limited sense that the later lynchings can be said to be an outgrowth of these frontier practises. Although the latter were doubtless partially responsible for establishing American habits of lawless dealing with certain types of offenders, nevertheless they lacked some of the most significant features of the later lynchings. The earlier attempts to mete out justice extralegally were generally to be found only in regions where the ordinary tribunals were absent or inadequate. They proceeded according to a form of trial of their own, and they inflicted the death penalty only for the graver offenses. Contemporary lynching, on the other hand, is carried on in settled regions where the courts of law are in full operation. There is no process for establishing the guilt of the accused; the punishment is death, often accompanied by torture and other sadistic acts, applied in many instances to persons charged with offenses which according to the ordinary standards of civilization are of a minor character. This extreme form of mob violence is practised in all parts of the United States, but predominantly in the southern and southern border states and most frequently against Negroes.

The racial and sectional aspect of lynching appeared first during the two or three decades immediately preceding the Civil War. The spread of the frontier influence into the older sections and the growing bitterness of the slavery controversy combined to make social conditions at the time especially turbulent. In the south the methods of mob law were applied with increasing frequency and severity against persons charged with any sort of tampering with slavery. There were numerous instances of violent treatment—by flogging, tarring and feathering and occasionally hanging—of abolitionist agitators and persons accused of aiding runaway slaves or otherwise aligning themselves with the anti-slavery cause. After the Civil War southern Negroes became the chief objects of these extralegal proceedings. The original Ku Klux Klan played the chief role in "disciplining" former slaves both by suppressing their night maraudings and by frightening them out of the exercise of legal rights. To some extent the negligence or favoritism of the carpetbag governments in dealing with offenses by Negroes supplied the provocation for such "self-defense" on the part of the

whites, a habit which quickly developed into the practise of lynching.

There are no official statistics of lynchings, but the *Chicago Tribune* from 1882 through 1917 and more recently the Tuskegee Normal and Industrial Institute and the National Association for the Advancement of Colored People have presented annual summaries. These summaries do not agree in every numerical detail; with the lack of a precise definition of lynching there may be uncertainty as to whether a particular episode is a case of mob slaying, in alleged behalf of the community, or a case of ordinary murder or manslaughter in which several persons take part. All the summaries, however, exclude the instances of deaths in riots (even race riots) and "gang" slayings; and since in the great majority of cases there is no difference of opinion as to the presence or absence of the characteristic features of a lynching, the several summaries are in approximate agreement.

The summaries show the total number of lynchings from the early 1880's through 1930 to be considerably over 4000. According to a summary revised to 1932 by the *Negro Year Book* issued by the Tuskegee Institute 4589 persons were lynched between 1882 and 1931, 3307 of them Negroes and 1282 whites. Only the six New England states have been free from lynchings during this period. There has been a fairly steady decrease in the annual number of lynchings throughout the country since the beginning of the twentieth century, but the sectional and racial character of the lynchings has become more pronounced. For the country as a whole the average annual number of persons lynched has fallen from 154.1 for the decade of 1890-99 to 31.2 for the decade of 1920-29, so that the number of lynchings in the latter decade is slightly over one fifth the number for the earlier decade. Yet the southern proportion of the total number of lynchings has risen from 87 percent in the decade of 1890-99 to 95.5 percent for 1920-29; and the proportion of Negroes in the total number of persons lynched has risen from slightly over 72 percent in the earlier decade to approximately 90 percent in the latter decade. It is interesting to note further that the largest number of lynchings in the south have not occurred in the regions where the percentage of Negroes in the total population is highest, but in those sections where the Negroes number less than 25 percent of the inhabitants. To explain this fact it is said that in the "black belt" regions the large landowners are to a greater degree de-

pendent upon Negroes as tenants and laborers, while in the more sparsely settled regions, where the proportion of Negroes is lower, the economic competition between the poor white and Negro farmers is keener and the racial hostility between them correspondingly stronger.

A typical lynching crowd appears to be made up of younger men from the relatively poorer and uneducated families. In some instances, however, educated men of high economic and social standing participate, and frequently the lynching is approved or at least condoned by large sections of the better elements of the community. This tolerance appears in many cases to be due to a fear of the dangers—physical, economic, social—that would be incurred by any outspoken condemnation of a practise which is approved by a substantial proportion of the community.

The general causes of lynching are to be found in the frontier heritage of Americans and their pervasive disposition to hold formal law of little account when it runs counter to popular desires and prejudices, as well as in the economic and social situations already noted. The common justification offered in the south for the lynching of Negroes is that prompt, conspicuous punishment freed from the delays and technicalities of formal legal proceedings is necessary in order to protect white women from sex assaults by Negroes. This contention, which is not given much weight outside the south and is coming to be discredited by fair minded southerners, has no statistical substantiation. Concerning the total number of persons lynched from 1889 through 1930 homicide stands first among the offenses charged, covering about a third of the cases; rape stands second, at about one seventh; rape and attempted rape together stand at less than one fourth. In an overwhelming majority of the instances of Negroes lynched the charge is some offense against whites. The graver offenses—murder, rape, arson, assault—predominate; but in many cases the charges are of a strikingly trivial sort, such as slapping a white child, using offensive or boastful language, suing or testifying against a white, expressing sympathy for a lynched Negro, seeking employment in a restaurant or accepting appointment to a postmaster-ship. The lynchings spring in part from an unreasoning fear that the Negro, differing as he does from the whites in certain marked bodily characteristics, is more brutish and that his brutishness is likely to be manifested with peculiar unrestraint against members of a race

from which he feels he has suffered indignities. Another cause of lynching is to be found in the quick and passionate resentment among large sections of the southern whites against any gesture of equality on the part of the Negro. These whites hold that their economic and social superiority is insecure unless the Negro is forced to "keep his place." They are determined that he shall remain a servant instead of a competitor. Thus the southern lynchings are manifestations of the same sort of attitude that has led to the other discriminatory measures, legal and extra-legal, against the Negro: suffrage disfranchisement, residential segregation, discrimination in the provision of educational facilities and in the processes of trials before the courts. In addition they are manifestations of a mob psychology often distinctly sadistic in character.

A description of lynching as a product of peculiar race relations in the southern states does not, however, explain the social implications of the practise. As violent manifestations of a racial antagonism mixed with economic rivalry the pogroms of czarist Russia and the terrorist activities against Jews in Germany and the states of southern Europe are in a class with lynching. Similarly the conflicts between labor and capital often give rise to what are in essence lynchings. In this connection lynching should be studied in its relation to the violent activities of the "Molly Maguires" among the Pennsylvania anthracite mine workers in the 1870's and among the western miners a few decades later; or, on the other side of the struggle, to the various attempts to cure labor radicalism by violence, as in the personal assaults and the destruction of property directed against the I. W. W. at Everett, Washington, in 1916, and at Centralia in the same state in 1918. In the attack on labor radicals the intellectual and emotional attitudes of a lynching crowd sometimes stand out clearly even when the attack is conducted through the agencies of formal law. In the criminal prosecution of I. W. W. members at Centralia in 1919-20 and of Thomas Mooney in California the groups chiefly instrumental in instigating the prosecutions and forcing the execution of the verdicts ignored the revelations that fraud and perjury played a determining part in securing the guilty verdicts; they displayed the lyncher's indifference to the absence of clear evidence against the suspected offender, the same uneasiness with regard to their own economic security, the same determination to have the group to which the accused belongs taught by the lesson of his extreme

punishment to keep to its proper station in the community.

Condemnations of lynching have in recent years issued increasingly from responsible agencies of opinion, particularly in the south. Appeals and arguments against the practise are made in the resolutions of educational and religious associations, in the editorial columns of leading newspapers and in the messages of governors. Serious studies have been instituted by the Commission on Inter-racial Cooperation, by the Records and Research Department of the Tuskegee Institute, the Commission of Southern Women for the Prevention of Lynchings and the National Association for the Advancement of Colored People. There is a growing realization of the moral and social cost of lynching and of the primary responsibility on the part of southern whites, co-operating with Negroes, to find a remedy for the evil.

Attempts to curb lynching by legislation have taken various forms. In some instances there have been legal prosecutions under the ordinary statutes against homicide, riot and assault. During the last few decades a number of states have enacted statutes aimed specifically at lynchers. The statutes contain such provisions as the following: punishment of individuals who participate in a mobbing or lynching, who break into a jail or take a prisoner from the custody of an officer or who interfere with sheriffs or other officers in the execution of orders of the courts; removal of officers who prove negligent in protecting prisoners; liability of counties in which a lynching occurs for damages to legal representatives of a person lynched; the giving to officers of the law special powers of summoning a posse to protect a prisoner from seizure; the granting the persons injured or the heirs of a person slain in a lynching a special right of action for damages against the participants in the lynching. Although these legal measures have been applied in some instances they appear to be ineffective, particularly in the regions where the remedies are most needed. Here the prosecutors are less likely to institute proceedings against the lynchers, coroners' juries are likely to decide that the victim came to death "at the hands of persons unknown to the jury," grand juries make little effort to discover evidence sufficient to convict and trial juries are unlikely to convict. The recent decrease in the number of lynchings has apparently been due chiefly to the wide public criticism of officials who are lax in their efforts to prevent a lynching. There are, however, no cer-

tain indications of a noticeable diminution of the disposition to lynch, among the elements of the population chiefly active in the practise. If the number of persons lynched is added to the number of lynchings prevented by efficient official action the annual totals have remained fairly constant in recent decades. Further legislation has been proposed for increasing the power of the state authorities to investigate and prosecute in cases of death caused in mass attacks, to order changes of venue in the trials of lynchers and to suspend officials who are negligent in protecting prisoners from seizure by a mob. It is often suggested that the remedy for lynching is to be found in more prompt, efficient action on the part of courts and prosecuting officials in dealing with crime, so that the people may feel assured that the tribunals of the law are competent to protect the community from dangerous crimes. But the remedy hardly meets the evil in its most prevalent form, for the negligence of public officials is displayed least in the cases of offenses of Negroes against whites. In many instances moreover persons have been lynched after their prompt conviction by the regular courts. In view of the ineffectiveness of existing state measures and in order to secure the intervention of officials whose tenure of office is relatively independent of local sentiment there have been numerous proposals for federal legislation against lynching. Typical of these is the bill prepared by Representative Dyer of Missouri and introduced in Congress in 1920 and again in 1921. It was passed by the House in 1922, but defeated in the Senate. The Dyer measure provided for fine or imprisonment of officers proved negligent in their efforts to protect prisoners from seizure, fixed a heavy liability in damages on a county in which a lynching occurred and imposed prison sentences on private individuals participating in a lynching. The constitutionality of any such federal legislation is in doubt, inasmuch as control of lynching could hardly be brought within the scope of any of the enumerated powers of Congress. To say that Congress may intervene positively either in punishing state officials who neglect to protect life, liberty and property or in punishing the attacks by private individuals whom the state neglects to punish would require a novel and unusually strained interpretation of the power of Congress to enforce that clause of the Fourteenth Amendment which forbids a state from depriving a person of life, liberty or property without due process of law.

It is generally agreed that all legislative

measures can at best be of only incidental and supplementary effect unless they are accompanied by changes in the racial attitudes, economic conditions and moral standards which give rise to or tolerate lynching and until the practise is outlawed by public opinion. Recent pronouncements against lynching give primary consideration to the problem of elevating generally the social and economic position of the Negro and of improving the relations between Negroes and whites; and they direct attention to the harmful consequences of lynching in debasing the reputation of the United States, particularly the south, in the eyes of the world at large, in brutalizing those who come under the influence of the practise and in promoting a general disrespect for law, order and basic human rights.

FRANCIS W. COKER

See: VIOLENCE; MOB; RACE CONFLICT; NEGRO PROBLEM; KU KLUX KLAN; ANTIRADICALISM; JUSTICE, ADMINISTRATION OF; LAWLESSNESS; FRONTIER.

Consult: Cutler, J. E., *Lynch-law* (New York 1905); White, W. F., *Rope and Faggot* (New York 1929); Southern Commission on the Study of Lynching, *Lynchings and What They Mean* (Atlanta 1931); Dowd, Jerome, *The Negro in American Life* (New York 1926); Reuter, E. B., *The American Race Problem* (New York 1927); Adams, J. T., "Our Lawless Heritage" in *Atlantic Monthly*, vol. cxlii (1928) 732-40; Reilly, L. W., "Lynching: a National Crime" in *Catholic World*, vol. cxxvii (1928) 396-403; Johnson, C. S., *The Negro in American Civilization*, American Social Science series (New York 1930); National Association for the Advancement of Colored People, *Thirty Years of Lynching in the United States, 1889-1918* (New York 1919); *Negro Year Book*, compiled by M. N. Work, published in Tuskegee since 1912.

LYON, MARY (1797-1849), American educator. Mary Lyon was born in rural Massachusetts, where she attended the district schools and began to teach at the age of seventeen. She continued to teach and study alternately, and it was during this period that she acquired the intense religious convictions which made her the most pious of all early American woman educators. In 1828 she and Zilpah P. Grant opened at Ipswich, Massachusetts, a seminary for young women which was to have educational standards equal to those of men's colleges. Her long held ambition to provide a liberal and thorough English education for girls who had neither the money nor the desire to attend the expensive and poorly staffed academies of the day came to fruition when she opened Mount Holyoke Female Seminary under great difficulties in 1837. She never took an interest in the broader problems of women's rights; her aim was to

assist young women "who were struggling to gain an education against discouraging odds" and to "prepare young ladies of mature minds for active usefulness, especially to become teachers." Her school was also designed to further religious conversion and to encourage missionary activity. A feature of the consistent principles which she adopted for the seminary and against which there was much opposition was the performance of all the domestic work by the students and teachers during the school's early struggle for permanent existence.

Mary Lyon's remarkable mental power was revealed as student, teacher and administrator; her ideas were carried out with striking success in the school she directed until her death. To the influence of the Mount Holyoke Seminary, later Mount Holyoke College, may be traced the establishment of other institutions for the higher education of women.

EDGAR W. KNIGHT

Works: *Female Education: Tendencies of the Principles Embraced and the System Adopted in the Mount Holyoke Female Seminary* (South Hadley 1839); *A Missionary Offering* (Boston 1843).

Consult: Hitchcock, Edward, *Power of Christian Benevolence Illustrated in the Life and Labors of Mary Lyon* (new ed. New York 1858); Gilchrist, B. B., *Life of Mary Lyon* (Boston 1910); Fiske, Fidelia, *Recollections of Mary Lyon* (Boston 1866); Bradford, Gamaliel, *Portraits of American Women* (Boston 1919) ch. iii; Nutting, M. O., *Historical Sketch of Mount Holyoke Seminary* (Washington 1876); Stow, Sarah D., *History of Mount Holyoke Seminary, South Hadley, Mass., during the First Half Century* (Springfield, Mass. 1887); Howe, M. A. DeWolfe, *Classic Shades: Five Leaders of Learning and Their Colleges* (Boston 1928) ch. ii; *Pioneers of Women's Education in the United States*, ed. by Willystine Goodsell (New York 1931) pt. iii.

MABILLON, JEAN (1632-1707), French ecclesiastic and historian. Mabillon was born in the village of Saint-Pierremont in Champagne, distinguished himself as a scholar at the diocesan seminary and took the monastic vows in 1654. He injured his health by overapplication and was sent for change of air from abbey to abbey, where he was set to unintellectual offices. His unquenchable love of study, which was unmixed with motives of personal ambition and which was never allowed to conflict with his religious duties, was at last given scope when in 1664 he was transferred to Saint-Germain-des-Prés at Paris.

Although the seventeenth and eighteenth centuries were a period of general decadence for French monasticism, yet by reaction they pro-

duced a remarkable group of reformed abbeys, the congregation of Saint-Maur, which has made the name Benedictine proverbial for laborious and disinterested scholarship. Saint-Germain stood at the head of this congregation; with its dependent abbeys it formed a sort of new university at a time when the study of history even on the ecclesiastical side had never yet been taken seriously by any of the older universities. By their editions of the fathers and of mediaeval writers and even more perhaps by their production of aids to study, such as *L'art de vérifier les dates* (Paris 1750; 3rd ed., 3 vols., 1783-87), the immensely expanded edition of Ducange's *Glossarium* (6 vols., Paris 1733-36), the *Gallia christiana* (16 vols., Paris 1739-1877) and the *Histoire littéraire de la France* (vols. i-xxxvi, Paris 1733-1927), they laid foundations for the study of church history and of mediaeval history in general which remain firm to the present day. Even Mabillon's stupendous industry and wonderful memory and judgment could not have carried him through the works which stand in his name without much collaboration with his juniors, as he himself had collaborated with his contemporary Luc d'Achery. His *De re diplomatica* (Paris 1681, and supplement 1704) is not only a work of great extent but it also laid for all time secure foundations for the accurate testing and the study of mediaeval charters and similar documents. His *Acta sanctorum ordinis S. Benedicti* runs to nine folio volumes (Paris 1668-1701), his *Annales ordinis S. Benedicti* to six (Paris 1703-39); in each case the last volume was completed and brought out by a colleague after his death. Brief but equally masterly is his *Traité des études monastiques* (Paris 1691). His little book on the worship of unknown saints (*Eusebii romani . . . epistola de cultu sanctorum ignotorum*, Paris 1698; tr. into French, 1698) was condemned at Rome for its freedom of criticism and tolerated only in a second softer edition which appeared in 1705 (French translation, 1705). Mabillon stands unapproached at the head of all monastic historians.

G. G. COULTON

Consult: Broglie, E. de, *Mabillon et la société de l'abbaye de Saint-Germain-des-Prés*, 2 vols. (Paris 1888); Bäumer, S., *Johannes Mabillon* (Augsburg 1892); Bergkamp, J. U., *Dom Jean Mabillon and the Benedictine Historical School of Saint-Maur* (Washington 1928); Johnson, Allen, *The Historian and Historical Evidence* (New York 1926); Sellin, T., "Dom Jean Mabillon—a Prison Reformer of the Seventeenth Century" in *American Institute of Criminal Law and Criminology, Journal*, vol. xvii (1926-27) 581-602.

MABLY, ABBÉ GABRIEL BONNOT DE (1709-85), French historian, moralist and political philosopher. Mably's secretaryship at court between 1741 and 1748 gave him an insight into affairs of state and intensified his moralistic aversion to political corruption and to luxury. After the appearance of his *Droit public de l'Europe* (2 vols., 1746), which was based upon a digest of available international treaties from 1648 to 1748 and which became a standard work throughout Europe, he was ranked with Grotius and Pufendorf as an authority in international relations. In his retirement he then began to produce a number of works, most of which were oriented about the purpose of ameliorating the contemporary evils of France but which carried him into widely ramified branches of social and political philosophy. While Rousseau's claim to have influenced him cannot be substantiated, his works plainly reveal his intimate acquaintance with the thought of Plato, Cicero, Locke and his brother Condillac. He was firmly convinced that psychology, ethics and politics were all different aspects of natural law; and the first dictate of natural law, according to his rather arbitrary assumption, was equality. Denying the validity of the social contract he deduced from his belief that men were equal in their fundamental make up the premise that they should also be equal in society; he further insisted that political and legal equality had no meaning without an approximation to economic equality. Mably cannot, however, be classed as a communist, although he is frequently so regarded and although he actually inspired Babeuf. He believed communism to be the ideal system and posited the possibility that it had existed in the primitive state of man. But a quality of realism and an inclination toward the evolutionary standpoint prevented him from espousing any political system which failed to take full account of human nature and of the peculiar history and customs of the peoples concerned. In the masses, whom he considered corrupted by centuries of poverty and unnatural environmental conditions, he had no faith; when he came to make practical proposals, he tended to be moderate. Through certain aspects of his thinking, such as his humanitarianism, his conviction that private property was the root of all social troubles and his reiterated principle that property was not a right but a state given privilege and might justly be restricted, he has points of contact with modern socialism. He did not, however, understand the implications of state ownership. Sump-

tuary and agrarian legislation, the restriction of industry and commerce, and inheritance laws were some of the devices which he recommended as means to bring about a more equitable distribution of property. He also advocated the dissemination of education and the establishment of a more humane legal code. In his consideration of actual political reforms he showed himself something of a prophet; thus in his sketch of a new constitution of France to establish what he called a *monarchie républicaine* he sounded warnings of possible dangers which appear valid even today, and in his *Des droits et des devoirs du citoyen*, written as early as 1758, he predicted the revolution and its stages with a remarkable prescience of the still distant events. His *De la législation* (1776), a work of practical political insight, was not without effect in concentrating public attention on the calling of the Estates General. While his general importance in the formation of revolutionary opinion cannot be accurately estimated, it is certain that he was in his own time classed with Rousseau and that his opinions were frequently solicited both before and after the revolution. Robespierre went to him for inspiration. He analyzed several constitutions; in 1770 he accepted an invitation to frame a constitution for Poland. Mably also gave much attention to history, his attitude toward which plainly reveals his leaning toward moral didacticism; in the eighteenth century his *Observations sur l'histoire de France* (2 vols., 1765) was a standard work.

ERNEST A. WHITFIELD

Other works: *Entretien de Phocion, sur le rapport de la morale avec la politique* (1763), English translation ed. by W. Macbean (London 1769). Mably's complete works have been edited by G. Arnoux, 15 vols. (Paris 1794-95).

Consult: Whitfield, E. A., *Gabriel Bonnot de Mably*, London School of Economics and Political Science, Studies, no. 104 (London 1930); Driver, C. K., "Morelly and Mably" in *Social and Political Ideas of Some Great French Thinkers of the Age of Reason*, ed. by F. J. C. Hearnshaw (London 1930) ch. ix; Girsberger, H., *Der utopische Sozialismus des 18. Jahrhunderts in Frankreich*, Züricher volkswirtschaftliche Forschungen, vol. i (Zurich 1924) p. 158-78; Sée, H., *Les idées politiques en France au XVIII^e siècle* (Paris 1920); Martin, Kingsley, *French Liberal Thought in the Eighteenth Century* (London 1929) p. 242-50.

MABUCHI, KAMO (1697-1769), Japanese historian and language reformer. Mabuchi was the son of a Shinto subpriest of a small shrine in the province of Totomi. He first studied Confucianism but in 1733 he came to Kyoto and be-

came a disciple of Azumamo Kada (1669-1736), the founder of the new movement for the study of the Japanese classics. He succeeded to the master's mantle as the leader of the new movement and in 1738 came to Yedo (Tokyo), where he established a school and attracted many disciples.

Mabuchi with Motoori and Hirata represents that group of Japanese scholars who inaugurated the renaissance of the ancient Japanese language and culture and freed Japanese civilization from its domination by Chinese and Hindu influences. Mabuchi urged the study of the old *Manyoshu* and *Kojiki* and attacked the current view that these were only "for the amusement of women." He sought to find in these ancient writings the essential ideals of Japanese religion and morals. The Chinese philosophy, he maintained, was responsible for the continual state of civil war in China and was for this reason to be cast aside. The introduction of Chinese morals and luxuries into Japan also led to the widening of the gulf between the emperor and the people. Mabuchi emphasized the reverence and obedience owed the former by the latter, although he did not carry the point to its logical conclusion by placing the emperor above the Tokugawa shogunate. The movement which he inaugurated, however, later developed along its logical line and culminated in the creation of new loyalty to the emperor and in a strong nationalism born of the consciousness of the unique culture and life of the Japanese race.

YUSUKÉ TSURUMI

Consult: Satow, E. M., "The Revival of Pure Shinto" in Asiatic Society of Japan, *Transactions*, vol. iii (1875) appendix, p. 10-17.

MCADAM, JOHN LOUDON (1756-1836), British road builder. Although not an engineer McAdam did more than any other man of his time to make highway traffic quick, comfortable and safe from accidents as well as less destructive of draft animals. As a local road trustee and against prejudice and opposition he began road making experiments at his own expense, of which over £5000 was later repaid him by the government. At that time British roads were for the most part mere tracks often worn into ditches and unusable in bad weather. McAdam perfected a process of road making since known as "macadamizing," the essential feature of which is the use of uniformly small broken stone, which is rolled in successive thin layers so that it consolidates by its own angles, without binding

material, into a smooth, impenetrable surface. In addition he carried on an extensive campaign for better roads in the interest of commerce and advocated combining the hundreds of hostile parish road trusts into unified authorities headed by a higher type of road commissioner. He was constantly consulted by local bodies and in 1816 was placed in charge of the turnpikes around Bristol. Parliamentary inquiries in 1819 and 1823 served to spread his views, and his appointment in 1827 as surveyor general of roads for Great Britain put his methods and ideas into general practise. In the construction of roads McAdam commonly hired unemployed workers in the parishes, using women and children for breaking stone; pauper labor he opposed on the ground that paupers of long standing could or would do very little. He wrote two books to promote his ideas, *Practical Essay on the Scientific Repair and Preservation of Public Roads* (London 1819) and *Remarks on the Present System of Road Making* (Bristol 1816, 9th ed. London 1827). To McAdam's efforts was mainly due the development of the fine network of mail coach ways which met the needs of expanding industry and commerce in the early days of the factory system and contributed greatly to England's rapid economic advance before the era of the railways.

SOLON DE LEON

Consult: Salkield, T., in East Herts Archeological Society, *Transactions*, vol. i (1899-1901) 305-16.

MACANAZ, MELCHOR RAFAEL DE (1670-1760), Spanish statesman and jurist. Macanaz, who was born in the province of Albacete of a family of the lower nobility, studied law at Salamanca and became a practitioner. On the death of Charles II he aligned himself with the Bourbon party, and his whole subsequent career was devoted to the pursuit of a political ideal identified with the historic role of the Bourbon dynasty in Spain. To this ideal he dedicated all his energies as well as his literary works of erudition and jurisprudence. When Philip of Anjou, grandson of Louis XIV, ascended the Spanish throne, Macanaz concentrated upon the task of adapting to Spain the centralized system of government existing in France. The politico-administrative privileges in the regions then enjoying autonomy were suppressed, the more important being abolished entirely and those of secondary significance being reduced in scope to the mere preservation of institutions of civil law and the like. A new method of government

and administration of justice was introduced in Valencia, Aragon and Catalonia, Navarre alone being spared this political assimilation in return for the loyalty with which it served Philip V in the War of the Spanish Succession. Macanaz also prepared a project to reduce the Court of Inquisition to an instrument whose activities should all be initiated and controlled by the king; and he advocated a policy regarding relations with the Vatican, known as regalism, which would lead to strong civil intervention in the affairs of the church. He failed for the most part in the last two undertakings, and the influence of his enemies was sufficiently strong to secure his retirement from public affairs.

ROMÁN RIAZA

Consult: Maldonado Macanaz, J., "Noticia de la vida y escritos de Melchor Rafael de Macanaz" in Macanaz, Melchor Rafael de, *Regalias de los Señores Reyes de Aragón*, Biblioteca Jurídica de Autores Españoles, vol. i (Madrid 1879); Gomez de Baquero, E., "Melchor Rafael de Macanaz" in R. Academia de Jurisprudencia y Legislación, Madrid, *Jurisconsultos españoles*, vol. ii (Madrid 1911) p. 97-109; Menéndez y Pelayo, Marcelino, *Historia de los heterodoxos españoles*, 3 vols. (2nd ed. Madrid 1880-81) vol. iii, p. 45-54.

MACARTHUR, JOHN (1767-1834), Australian agriculturist and pastoralist. Macarthur went to Australia as an ensign in the New South Wales Corps in 1790 and was granted land at Parramatta in 1793. He took a prominent part in the political affairs of the colony, frequently in conflict with the authorities; but more important was his contribution to the economic development of Australia. Macarthur realized that Great Britain would not continue forever to subsidize New South Wales, and certain breeding experiments led him to conclude that fine wool might provide an article of export which would give the colony a means of self-support. If grown on free or cheap land it would bear the small expense of convict labor, and it would incur low freight charges as back loading on returning transports which at that time went empty to China to load cargoes of tea. Australian wool could thus replace diminishing Spanish supplies on British looms. To develop the right wool bearing sheep Macarthur obtained merinos, first of the Escorial type introduced from Cape Colony, and later of the Negretti type from the royal stud at Kew in England. The results of his breeding activities won full recognition by 1822, when he was awarded two gold medals for having exported to Britain "fine wool equal to the best Saxon merino." This meant that Australian

wool could reach a standard well above that of "the best piles of Old Spain." The full fruit of his activity came when a way was discovered over the Blue Mountains in 1814 and it was found that merino sheep would thrive in the vast inland plains thus opened for settlement. The export of wool was greatly favored by the removal of British protective duties on colonial wool in 1825. In turn cheaper raw materials strengthened the export of British woolen manufactures. There was an influx of capital into Australia and a rush of settlers to obtain land for sheep runs. "Assigned" convicts herded the sheep. Macarthur's foresight thus resulted in the foundation of the wool industry, which remains the principal support of Australian economy. It transformed Australia from what was essentially a number of penal colonies to an important factor in the economy of the British Empire and it paved the way for the long dominance of the pastoral interests in Australian political life.

E. O. G. SHANN

Consult: Some Early Records of the Macarthurs of Camden, ed. by Sibella Macarthur Onslow (Sydney 1914); Coghlan, T. A., *Labour and Industry in Australia*, 4 vols. (London 1918) vol. i, pt. i, ch. vii; Shann, E. O. G., *An Economic History of Australia* (Cambridge, Eng. 1930) p. 41-47 and ch. vi.

MACARTHUR, MARY REID (1880-1921), British labor leader. Mary Macarthur's career epitomizes the history of the woman movement from the beginning of the twentieth century to the post-war period, as she was in the forefront of its industrial and political battles and had a large share in shaping its policies. Although she was the daughter of a well to do merchant she became interested in the labor movement at an early age through the Shop Assistants' Union in Glasgow. Her enthusiasm amounted almost to a religious fervor, and while she was still only twenty-three she was made secretary of the Women's Trade Union League in London. At that time women's labor was very ill paid, working conditions were often appalling and except in the cotton industry little had been achieved in organization, women being frequently excluded from the existing unions. Mary Macarthur was opposed to a permanent separation of men's and women's organizations, but she met the immediate necessity of holding together scattered and poverty stricken groups of women workers and giving them some bargaining strength by working toward the formation in 1906 of the National Federation of Women

Workers, a general union open to all women in unorganized trades or not admitted to their appropriate unions. In the following years she effectually used the new federation in the struggle to establish trade boards to set minimum wages in the sweated trades and in the great strikes to enforce the Trades Board Act of 1909 and later to extend its scope. The federation helped also to secure for women the full benefits of the National Insurance Act of 1911 by becoming an approved society for its administration.

When war broke out in 1914 the growing importance of the women's labor movement was recognized by the appointment of Mary Macarthur as secretary of the semi-official committee of women of all classes and all parties formed to deal with the serious problem of unemployment. When this gave way to the problem of replacement of men by women, she served on the Labour Supply Committee of the Ministry of Munitions, where she fought for equal pay for equal work and backed the men's demand for restoration of trade union conditions, at the same time fostering an extensive organization campaign of the N. F. W. W. In 1918 Mary Macarthur represented the new political status of women by standing for Parliament as a Labour candidate. The following year she accompanied the British delegation to the International Labor Conference in Washington, D. C., and took an active part in the drafting of the convention on the employment of women before and after childbirth. Later she effected the amalgamation of the N. F. W. W. with the National Union of General Workers and planned that the remaining functions of the Women's Trade Union League be handed over to a women's section of the new General Council of the Trades Union Congress, thus completing the recognition of women's place in the regular labor movement.

GLADYS BOONE

Consult: Hamilton, Mary A., Mary Macarthur, a Biographical Sketch (London 1925); Drake, Barbara, *Women in Trade Unions*, Labour Research Department, Trade Union series, no. 6 (London 1920).

MACAULAY, FIRST BARON, THOMAS BABINGTON MACAULAY (1800-59), English historian. A faithful Whig in Parliament, an able civil servant in India, a remarkable orator although never a ready debater, an efficient cabinet minister, Macaulay is important chiefly as a writer of history. In his articles in the *Edinburgh Review*

(for example, that on Clive, on Warren Hastings, on Hallam's *Constitutional History*, on Ranke's *History of the Popes*) he virtually invented the historical essay, in which the subject is but a starting point for a condensed, vivid narrative or description centered on a limited topic. From 1825 to about 1840 these essays were Macaulay's main literary effort and they gave the *Edinburgh Review* new life. Thereafter until his death he devoted himself to his great *History of England*, which, planned to extend from 1685 to about 1820, was actually published in five volumes (1848-61), extending to 1702. The *Essays* and the *History* sold in the author's lifetime like popular fiction and still have a steady sale. His continued popularity depends more on his ability to tell a story than on the now outmoded splendor of his style. In critical use of sources, in professional technique generally, his standards were high.

Although Macaulay was more than an annalist and his famous chapter on England in 1685 is genuine social history he lacked the critical and synthetic interests of the modern sociological historian. He had indeed no capacity for philosophical generalization and never attempted scientific generalizations. The *History* is a unity, not merely because its author was an artist but also because he was a Whig. For him the Revolution of 1688 was an unmitigated good fortune such as only a sturdily virtuous, clean, strong and unthinking people like the English could have deserved. Although generally fair he could turn on enemies of these Whig values and sometimes on enemies of other, more humane values in a genuine, almost intellectual passion and be notably unfair—as he was to Bacon, to Marlborough and to Impey.

Macaulay may have increased professional historical interest in English social history; otherwise his influence on academic historians, with such a notable exception as the Trevelyan family itself, has been largely negative. Shocked alike by his popularity and his rhetoric, they have withdrawn to the composition of graceless monographs. Macaulay was the last great English historian to whom history was an unsullied art, who wrote of England recognizably as had Homer of Troy. On laymen he has exerted a great influence through his part in building up the mythical, symbolic side of English nationalism.

Macaulay and his writings form in a hundred ways an excellent source for the historian of nineteenth century opinion; when he contrasts

the small and unprogressive England of 1685 with the great and growing England of the industrial revolution, he is that rare person, the articulate man in the street. His most important official action was an expression of the same mind: his minute on education written in 1835 when he was on the Supreme Council of the governor general of India poured a shower of contempt on Indian thought and literature and was instrumental in crystallizing the government's educational aims as to the Europeanization of the natives, linguistically and otherwise.

CRANE BRINTON

Works: *The Works of Lord Macaulay Complete*, ed. by Lady Trevelyan, 12 vols. (new ed. London 1898).

Consult: Trevelyan, G. O., *Life and Letters of Lord Macaulay*, 2 vols. (new ed. New York 1908); Roberts, S. C., *An Eighteenth-century Gentleman and Other Essays* (Cambridge, Eng. 1930) ch. iii; Strachey, Lytton, *Portraits in Miniature* (London 1931) p. 169-80; Fisher, H. A. L., "The Whig Historians" in *British Academy, Proceedings*, vol. xiv (1928) 297-339; Gooch, G. P., *History and Historians in the Nineteenth Century* (London 1913) p. 294-307; Stephen, Leslie, *Hours in a Library*, 4 vols. (new ed. London 1905-07) vol. iii, p. 227-71.

McCORMICK, CYRUS HALL (1809-84), American inventor, manufacturer and philanthropist. McCormick was the son of a Virginia farmer and had little schooling. In 1831 he invented the first practical reaper. In 1847 he moved to Chicago, where he established a factory, dispensing with submanufacturers; thenceforward either alone or in partnership with his two brothers he outdistanced all competitors, and by 1884 was selling over 50,000 machines a year. His wealth was largely derived from investments in manufacturing, railroads and Chicago real estate rather than from his various patents.

During his lifetime many inventors contributed to the evolution of his original invention from a self-rake reaper to an automatic twine binder. These and other new agricultural implements played a large role in the rapid increase of grain production after 1850. McCormick adopted characteristic methods of modern mass production even before the Civil War: raw materials were processed according to an ordered factory schedule through the use of belt conveyors; output was standardized and any purchaser could buy parts for replacement. His efficient and world wide agency system, his large scale advertising policy, his absolute guaranty of satisfaction to the purchaser and his long term credit plan, enabling farmers to pay for a

machine from profits gained by its use, were uncommon in their day.

After 1860 competition between makers of harvesting machinery greatly increased, reaching a climax about 1878 in the "binder war," in which a dozen large manufacturers were involved. The McCormick-Deering rivalry was the most acute. The course of the struggle was marked by patent lawsuits, patent and twine pools, rebates from railroads, the breaking of price fixing agreements, and ruthless sales methods. In 1902 after several abortive attempts to consolidate the McCormick, Deering and three other firms combined with the aid of the house of Morgan to form the International Harvester Company, capitalized at \$120,000,000 and in control of the industry.

McCormick was influential in Democratic politics and liberally aided Presbyterian seminaries and colleges in Illinois and Virginia.

WILLIAM T. HUTCHINSON

Consult: Hutchinson, William T., Cyrus Hall McCormick (New York 1930); McCormick, Cyrus, *The Century of the Reaper* (Boston 1931).

MCCULLOCH, JOHN RAMSAY (1789-1864), British economist. McCulloch, a Scot by birth, studied law but found in economics a less dismal career. In 1818 he began his two years' editorship of the *Scotsman* and his twenty years' collaboration in the *Edinburgh Review*. Going to London in 1820 he made intimate contacts with the reigning school of classical economists. In 1828 he was made professor of political economy in the newly established University of London but resigned the privileges of the unendowed chair in 1832. From 1838 until his death he was comptroller of the stationery office.

McCulloch's place in the development of classical economics is definitely that of a disseminator. An encyclopaedic compiler and historian of economic development and thought, he produced three statistical and descriptive surveys of the past and present resources, industries and institutions of important countries. He also delved into the history of commerce, maritime law, money, interest and property in land. Besides numerous collections and editions of English economic tracts and a classified catalogue of the literature of political economy he has left sketches of the life and writings of Quesnay, Smith and Ricardo and editions of the *Wealth of Nations* (1828) and Ricardo's *Principles* (1846). In editing the former he endeavored "to make the reader aware of the fallacy or insufficiency

of the theories which Dr. Smith has sometimes adopted"; but the principles expounded by Ricardo, whose confidence he enjoyed more than any other man with the possible exception of James Mill, he accepted with little attempt at amendment. McCulloch's *Principles of Political Economy* (Edinburgh 1825, 5th ed. 1864), one of the most widely used manuals prior to the publication of John Stuart Mill's *Principles*, was essentially a reproduction of the orthodox ideas. On only one or two points is he to be credited with doctrinal contribution. He was practically alone among the classical economists in calling attention to the importance of consumption and clarified the Ricardian conception of capital, defining it as accumulated labor and thus dignifying the payment of interest into a payment for work. Labor, on the other hand, he declared to be a species of capital. Careless passages of similar import inflamed the labor writers of the time, while they illustrated the utility of economic science for the governing classes.

McCulloch is of historical interest as a captain in the ranks of the economists who played an important part in making England a free trade country and as an adherent of the wages fund doctrine in perhaps its most uncompromising form. Unlike many of the other secondary economists, however, he regarded the doctrine not as an antidote to unionism but as the keynote to the improvement of the laborer's condition. He favored unionism as the natural counterpart, in a competitive society, of capitalistic companies and combinations, its effect being to assure the workers the wages to which competitive conditions entitled them. On nearly every important contemporary issue McCulloch leaped into print, presenting what we would now consider the orthodox classical views, although in later years he seems to have moved with the tide and to have approved of a measure of social control. For a time he lent his influence to Francis Place's propaganda for birth control but withdrew when challenged by the respectable elements. At a time when economics was probably at the height of its prestige he was one of its shining lights. But he has not left his mark upon the science, and it is probable that his reputation will depend increasingly upon his work as one of its early historians and upon his statistical and historical compilations.

GUSTAV PECK

Other important works: The Literature of Political Economy (London 1845); *A Dictionary . . . of Commerce and Commercial Navigation* (London 1832; new

ed. by H. G. Reid, 1869, with supplement 1871); *A Dictionary . . . of the Various Countries, Places and Principal Natural Objects in the World*, 2 vols. (London 1841; new ed. by F. Martin, 4 vols., 1866); *A Descriptive and Statistical Account of the British Empire* (London 1837; 4th ed., 2 vols., 1854); *An Essay on the Circumstances Which Determine the Rate of Wages* (Edinburgh 1826, new ed. 1868). His correspondence with Ricardo has been collected in *Letters of David Ricardo to John Ramsay McCulloch 1816-1823*, ed. by J. H. Hollander, American Economic Association Publications, vol. x, nos. 5-6 (New York 1895), and *Letters of John Ramsay McCulloch to David Ricardo 1818-1823*, ed. by J. H. Hollander (Baltimore 1931).

Consult: Cannan, Edwin, *A History of the Theories of Production and Distribution in English Political Economy from 1776 to 1835* (2nd ed. London 1903); Halévy, É., *La formation du radicalisme philosophique*, 2 vols. (Paris 1901), tr. by Mary Morris (London 1928) p. 342-72.

MACDONALD, ALEXANDER (1821-81), British labor leader. Macdonald was more responsible than any other man both for building up national trade union organization among the miners and for securing them legislative protection. He began to work in a coal mine at the age of eight, entered Glasgow University at twenty-five, became a mine manager, achieved financial independence through speculation and retired in 1855 to devote himself to the miners' interests. He organized the Scottish miners, largely through demands for abolition of payment of wages in truck, and stimulated reformation of the county unions in the north of England which had recently broken up after the collapse of the earlier national union. Macdonald also advocated legislation to improve health and safety in the mines, including demands for employers' liability, and to protect the miners' wages against deductions by dishonest weighing of their output. This led to the Mines Regulation and Inspection Act of 1860 and later amending acts, under which the miners secured the right to appoint their own checkweighman.

In 1863 Macdonald organized a Miners' National Union, of which he was president until his death. It grew greatly and was chiefly responsible for securing the passage of the Coal Mines Regulation Act of 1872, the foundation of modern British mining legislation. Meanwhile in conjunction with Alexander Campbell of the Glasgow Trades Council Macdonald had begun an agitation against the Master and Servant Law, under which hundreds of miners were sent to prison for breach of contract every year and which was drastically amended as a result of the agitation. As part of this campaign the first

national Trade Union Congress met at Glasgow in 1864; out of this arose the permanent Trades Union Congress. He played a leading part also in the struggle for legal recognition of trade unions and in the political reform movement which led up to the enfranchisement of the urban workers in 1867. Macdonald was chairman of the Trades Union Congress Parliamentary Committee in 1872-73 and an active member of the Labour Representation League; in 1874 he was elected member of Parliament for Stafford, retaining the seat with Liberal support until his death.

Macdonald believed in parliamentary rather than industrial action, in conciliation and arbitration rather than strikes, and was opposed to the creation of a centralized miners' industrial union. This led to a split in 1869, when nearly half the organized miners joined the Amalgamated Association of Miners, led by Thomas Halliday, which advocated an energetic strike policy. This body collapsed in the great depression of the later 1870's; the depression also seriously weakened the National Miners' Union, which fell to pieces after Macdonald's death. National organization was started afresh by the Miners' Federation of Great Britain in 1888. Macdonald's policy, however, continued to influence the British miners, who still lay great stress on social legislation and direct representation in Parliament, although they have broken with the Macdonald tradition in their militant strike policy.

G. D. H. COLE

Consult: Cole, G. D. H., *A Short History of the British Working Class Movement, 1789-1925*, 3 vols. (London 1925-27) vol. ii; Webb, Sidney and Beatrice, *The History of Trade Unionism* (rev. ed. London 1920); Johnston, Thomas, *The History of the Working Classes in Scotland* (Glasgow 1920); Baernreither, J. M., *English Associations of Working Men* (London 1889).

MACDONALD, SIR JOHN ALEXANDER (1815-91), Canadian statesman. Macdonald was born in Glasgow and was brought to Canada in 1820. He was called to the bar in 1836 and in 1844 he was elected to represent Kingston in the Legislative Assembly of Canada. In 1854 he was largely instrumental in bringing about the coalition of factions resulting in the creation of the Liberal-Conservative party, which remains one of Canada's major political parties. He took the leading part in bringing about in 1867 the confederation of Nova Scotia, New Brunswick and Upper and Lower Canada, and it was upon his initiative that the dominion was

extended by 1873 to include the Hudson's Bay Company's territories, British Columbia and Prince Edward Island, thus covering the entire northern part of the continent from ocean to ocean. He was himself in favor of a strong legislative union, and the element of strong central control in the federal constitution owes much to his influence. He was the first prime minister of the new Dominion of Canada and continued to fill this office until his death, except for the interval from 1873 to 1878. His defeat in 1873 was the result of charges of political corruption in connection with the charter for the building of the Canadian Pacific Railway, and it was thought that his eclipse on this occasion would be permanent. But in 1878 he came back to power on the "national policy" of high protection, a program which Canada has followed without radical changes from that day to this. During the remaining years of his life he proved invincible at the polls.

Macdonald had not in some respects an ideal code of political ethics. Although there were some points on which he knew no compromise, such as the preservation of law and order and the continuance of the British connection, in general he raised opportunism almost to the level of a political principle. It may, however, be doubted whether in the state of political morality then prevailing in Canada a statesman of stricter views could have guided the new nation more successfully than he did. He was a past master in the art of managing men, and in many ways the Dominion of Canada today is the creature of his statesmanship.

W. S. WALLACE

Consult: Memoirs of the Right Honourable Sir John Alex Macdonald (rev. ed. by J. Pope, Toronto 1930); *Correspondence of Sir John Macdonald*, ed. by J. Pope (Toronto 1921); Pope, J., *The Day of Sir John Macdonald*, *Chronicles of Canada* series, vol. xxix (Toronto 1915); MacDermot, T. W. L., "John A. Macdonald—His Biographies and Biographers" in *Canadian Historical Association, Report of the Annual Meeting held at Ottawa May 26 and 27, 1931* (Ottawa 1931) p. 77-84; Macpherson, J. P., *Life of the Right Honourable Sir John A. Macdonald*, 2 vols. (St. John, N. B. 1891); Parkin, George R., *Sir John A. Macdonald*, *Makers of Canada* series, vol. xviii (Toronto 1908); Wallace, W. S., *Sir John Macdonald*, *Canadian Statesmen*, no. 1 (Toronto 1924); Trotter, R. G., *Canadian Federation* (Toronto 1924); Cartwright, Richard, *Reminiscences* (Toronto 1912), and a rejoinder by Pope, J., *Sir John A. Macdonald Vindicated* (Toronto 1912); Smith, G., *Reminiscences*, ed. by A. Haultain (New York 1910); Dent, J. C., *The Last Forty Years*, 2 vols. (Toronto 1881); Willison, J. S., *Sir Wilfrid Laurier and the Liberal Party*, *Makers of Canada* series, vol. xi (new ed. Toronto 1926).

McDUFFIE, GEORGE (c. 1788-1851), American political leader. Although a native of Georgia McDuffie passed most of his adult life in the public service of South Carolina, serving as member of the state legislature from 1818 to 1820, as member of Congress from 1821 to 1834, as governor from 1834 to 1836 and as senator from 1842 to 1846. Like other statesmen of his group he began as a loose constructionist, but when in the period following 1820 the divergent economic development between north and south became marked he joined the strict constructionists. He denounced the "American System" as presumptuous in name, fallacious in principle and repugnant to the constitution. He opposed federal activity in internal improvements, except where military or postal needs were clearly served. His chief claim to distinction rests upon the relentless course he pursued in opposing the aggressive protective policy of the majority. His views on the tariff are best set forth in his speeches of 1824, 1830 and 1832 and in the report of the Ways and Means Committee on the tariff bill of 1828 (*United States, Congress, American State Papers, Finance*, vol. v, 1859, p. 944-58). Ignoring the most obvious cause of agricultural distress in the southern seaboard states—the opening of new cotton producing areas in the southwest—McDuffie became the chief spokesman of those who found sufficient explanation of the depression in the burden imposed by the protective system. This burden was the more galling because it was believed to be in defiance of the constitution. Starting with the doctrine that imports are paid for by exports he arrived at the conclusion that a tax on imports was virtually a tax on exports and that these, consisting in the main of cotton, tobacco and rice, bore the burden of taxes levied to promote manufactures. His "export tax" theory, set forth with great ingenuity and eloquence, gained wide acceptance in his state. He was one of the boldest advocates of nullification, not as a constitutional but as a revolutionary right. He had no constitutional scruples about the second bank and broke with his party chief on that issue by acting with the bank party. He was a staunch defender of slavery as a beneficent patriarchal institution, more humane than the wage system as it was developing under factory conditions (*Message of 1835*, abridged in *American History Leaflets*, no. 10, 1893). No collection of McDuffie's writings has been made and no adequate biography of him has been written.

GEORGE O. VIRTUE

MACEDONIAN PROBLEMS. *See* COMITADJI;
NEAR EASTERN PROBLEM.

MCGEE, THOMAS D'ARCY (1825-68), Canadian statesman and publicist. As a youth McGee emigrated from his native Ireland to the United States, where he engaged in journalism. He returned to Ireland in 1845, became associated with the Young Ireland group and shared their intensely idealistic nationalism. In 1848 he participated actively in a futile insurrection and then fled as a fugitive to the United States.

During the next nine years in newspapers which he edited successively in New York, Boston and Buffalo he defended the interests of the Irish immigrants against the attacks of the Know-Nothings. When he moved to Montreal in 1857 he found the cause that was to absorb his energies throughout the rest of his life—the establishment of a united British North America—and started the *New Era*, the first newspaper in the colonies dedicated to this purpose. Within its columns he emphasized the broad spiritual benefits of nationalism as the Young Irishlanders had done and drew an inspiring picture of a new British nation, sharing with the United States the life of the continent, which would result from union. He carried on his crusade in the Canadian legislature first as a member of the Reform and later of the Conservative party. The outbreak of the American Civil War gave him added arguments, since an unfriendly North placed the disunited colonies in peril. To the Maritime Provinces he pointed out the economic benefits that they would reap by joining hands with the Canadas in building a new nation. Thus by ceaseless advocacy in eloquent addresses and writings he helped perhaps more than any other individual to create the psychological basis for Canadian federation. McGee's influence survived his death at the hands of an assassin. His championship of Canadian nationalism was the acknowledged inspiration of the "Canada first" group, which played an important part in chalking out lines of political and economic development for the dominion.

ALEXANDER BRADY

Important works: *Federal Governments Past and Present* (Montreal 1865); *Speeches and Addresses Chiefly on the Subject of British-American Union* (London 1865); *A History of the Irish Settlers in North America* (Boston 1851; 5th ed. 1852); *The Catholic History of North America from the Earliest Period to the Census of 1850* (Boston 1852); *Irish Position in British and in Republican North America* (Montreal 1866, 2nd ed. 1866); *A Popular History of Ireland from the Earliest Period to*

the Emancipation of the Catholics (New York 1863); *A History of the Attempts to Establish the Protestant Reformation in Ireland* (Boston 1853); *Gallery of Irish Writers. The Irish Writers of the 17th Century* (Dublin 1846); *Historical Sketches of O'Connell and His Friends* (Boston 1845; 4th ed. 1854); *Life of Edward Maginn, Coadjutor Bishop of Derry* (New York 1857).

Consult: Skelton, Isabel, *Life of Thomas D'Arcy MacGee* (Gardinvale, Canada 1925); Brady, Alexander, *Thomas D'Arcy McGee* (Toronto 1925).

MCGEE, WILLIAM JOHN (1853-1912), American anthropologist and geologist. McGee was associated with the United States Geological Survey for ten years beginning in 1882; the next ten years he spent in the Bureau of American Ethnology and the remainder of his life in research in geology and conservation. His contributions to geology were conspicuous through his geological maps of the United States, which were standard for many years. He helped to lay the scientific foundations for the conservation movement, and his researches relating to potable waters of the United States were classic contributions to the solution of the pressing problems of urban water supply. The ultimate objective motivating these studies was the good of mankind; he carried this ideal over into anthropology, which he believed should above all concern itself with contemporary life. He visualized in advance of his time the development of a bureau for research devoted to the conservation of national life and advocated the detailed study of primitive peoples as an essential part of this program rather than as an end in itself. In anthropology his most original contributions were his field study of the Seri Indians ("Seri Indians" in United States, Bureau of American Ethnology, *Seventeenth Annual Report, 1895-96*, Washington 1898, pt. i, p. 9-344) and his observations upon desert environments; in the latter he presented concisely the interrelations of plant and animal life as constituting a kind of community and then observed man in this setting. McGee anticipated human ecology, as is seen in his best known papers on environment, the "Beginning of Agriculture" and "Beginning of Zooculture" (in *American Anthropologist*, vol. viii, 1895, p. 350-75, and vol. x, 1897, p. 215-30). He was one of the last of the group associated with J. W. Powell in the Bureau of American Ethnology; the broad and daring generalizations of these anthropologists have since proved largely untenable, but their insistence upon the collection of field data in language, culture and anatomy yielded invaluable mate-

rials which served as the basis of the interpretations of later scholars.

CLARK WISSLER

Consult: Washington Academy of Sciences, *McGee Memorial Meeting*, 1913 (Baltimore 1916); Hodge, F. W., in *American Anthropologist*, n.s., vol. xiv (1912) 683-87; McGee, E. R., *Life of W. J. McGee* (Farley, Iowa 1915).

MACH, ERNST (1838-1916), Austrian physicist, psychologist and philosopher of science. Mach was born in Moravia. As a youth he was taught classical languages by his father, who had been a tutor in aristocratic families; during the same period he worked two days a week with a cabinetmaker, a training which was to prove valuable in his later experimental work. After completing his studies at the University of Vienna he remained as a *Privatdozent* in physics. In 1864 he was appointed professor of mathematics and later of physics at the University of Graz. Three years later he was called to the University of Prague as professor of physics, serving also as rector during the year 1879-80. In 1895 a special chair of philosophy of the inductive sciences was created for him at the University of Vienna. On his retirement in 1901, after he had suffered a stroke of paralysis, he was made a member of the Austrian house of peers.

Mach began his scientific career with experimental studies in the physiology of the senses, publishing numerous articles in the publications of the Vienna Akademie der Wissenschaften. Later he turned to the more general problems of the methodology and philosophy of science. At an early age he had read Kant's *Prolegomena*, and later he was greatly impressed by Darwin's work. These two influences led him to look upon science not as a body of laws of the universe but as a biological instrument which humanity has fashioned for itself in order to master nature in the simplest way possible. The "principle of economy" as a methodological rule of scientific investigation, into which Mach's doctrine crystallized, was formulated by him shortly after 1861. It held that in order to accomplish a certain result the scientific investigator chooses "the simplest, the most economical and the most expedient means." On the basis of this principle and of the Kantian doctrine of phenomena, which he simplified into a doctrine of sensations as the sole content of immediate experience, Mach undertook a methodological analysis of the whole field of physics. In order to trace the

historical development of the separate branches of physics he went back to their sources and endeavored to establish the methods by which the various scientists were guided in their work. He was determined (after the fashion of Berkeley and Hume, whom, however, he had not read) to emancipate physics from all metaphysical elements, understanding by the latter term everything that is not immediately perceivable by the senses.

During his lifetime Mach was not understood and was for the most part repudiated by his colleagues, but after his death his doctrines began to exert a great influence in physics. His sensualistic attitude, from which Mach tried in vain to free himself, is accepted today by numerous physicists as a satisfactory epistemological foundation for science. His repudiation of the concept of substance proved to be a highly effective weapon against the doctrines of crude materialism. Mach also attacked atomism, which he regarded as a metaphysical doctrine. His criticism of the Newtonian conceptions of time and space served as a starting point for the relativity theory, although he himself wholly disagreed with this theory when he learned of it before his death. Not only Einstein's work but even the more recent developments in physics, such as Heisenberg's quantum mechanics, have been inspired by the Machian philosophy.

Mach's influence on the social sciences was mainly through psychology, which was affected by his work on the physiology of the senses and by his doctrine of sensationalism as a theory of mind, the latter being closely associated with the similar views of Avenarius. Indirectly his ideas on the methodology of physical sciences had a repercussion on the social sciences as well, reinforcing the belief propagated by instrumentalist philosophers that all scientific laws are merely conveniences rather than completely binding objective determinations. Mach's philosophical outlook also had an important repercussion on the socialist movement in Russia and Austria. In Russia a faction headed by Bogdanov sought to use Mach's doctrine with its rejection of all metaphysics as the new philosophic base for socialism. In Austria Friedrich Adler and his followers still remain Machians in their general philosophy.

HUGO DINGLER

Important works: *Die Geschichte und die Wurzel des Satzes von der Erhaltung der Arbeit* (Prague 1872, 2nd ed. Leipsic 1909), tr. by P. E. B. Jourdain (Chicago 1911); *Die Mechanik in ihrer Entwicklung* (Leipsic

1883, 8th ed. 1921), tr. from 2nd German ed. by T. J. McCormack (3rd ed. Chicago 1907) with supplement containing additions to 7th German ed. tr. by P. E. B. Jourdain (Chicago 1915); *Die Principien der Wärmelehre* (Leipsic 1896, 4th ed. 1923); *Die Prinzipien der physikalischen Optik* (Leipsic 1921), tr. by J. S. Anderson and A. F. A. Young (London 1926); *Beiträge zur Analyse der Empfindungen* (Jena 1886; 8th ed. with title *Die Analyse der Empfindungen und das Verhältnis des Physischen zum Psychischen*, Jena 1919), tr. by C. M. Williams and Sydney Waterlow (Chicago 1914); *Populärwissenschaftliche Vorlesungen* (Leipsic 1896, 5th ed. 1923), selections tr. from previous periodical publication by T. J. McCormack (3rd ed. Chicago 1898); *Erkenntnis und Irrtum* (Leipsic 1905, 5th ed. 1926), p. 331-414 tr. by T. J. McCormack as *Space and Geometry in the Light of Physiological, Psychological and Physical Inquiry* (Chicago 1906).

Consult: Dingler, Hugo, *Die Grundgedanken der menschlichen Philosophie, mit Erstveröffentlichungen aus seinen wissenschaftlichen Tagebüchern* (Leipsic 1924), and *Das Experiment, sein Wesen und seine Geschichte* (Munich 1928); Bouvier, Robert, *La pensée d'Ernst Mach* (Paris 1923); Henning, Hans, *Ernst Mach als Philosoph, Physiker und Psycholog* (Leipsic 1915); Lenin, N., *Materialism i empirio-kritizism*, vol. xiii of his *Sochineniya* (2nd rev. ed. Moscow 1928), tr. by David Kvitko as *Materialism and Empirio-criticism*, vol. xiii of his *Collected Works* (New York 1927); Becher, Erich, "The Philosophical Views of Ernst Mach" in *Philosophical Review*, vol. xiv (1905) 535-62; Bode, B. H., "Ernst Mach and the New Empiricism" in *Journal of Philosophy*, vol. xiii (1916) 281-90; Enriques, Federigo, *Per la storia della logica: i principi e l'ordine della scienza nel concetto dei pensatori matematici* (Bologna 1922), tr. by Jerome Rosenthal (New York 1929) p. 213-27.

MACHAJSKI, WACLAW (1866-1926), Polish-Russian social theorist and revolutionist. As a revolutionary Marxist, Machajski was arrested in 1892 and spent a decade in prisons and as an exile in Siberia, where he worked out a theory of the labor movement which was elaborated in his writings (all of which were published in Russian over the signature A. Volski) and known in the history of the Russian revolutionary movement as *Makhayevshchina*. In 1903 he escaped from Siberia to western Europe. He returned to Russia after the revolution of 1905, left again about the end of 1907 or early in 1908 and finally returned after the downfall of the czarist regime.

The gist of his theory is the idea that nineteenth century socialism in general and Marxian socialism in particular represent the ideology not of the working class, which he thought of in terms of manual workers only, but of "the growing army of intellectual workers, the new middle class which with the progress of civilization absorbs within itself the middle strata of

society." Higher education he considered the privileged property of this rising bourgeois class, a sort of invisible capital expressing itself either actually or potentially in the incomes paid to this class, which are higher than the wages paid manual labor. The most radical, malcontent section of the intellectual workers, according to Machajski, opposes private capitalist rule and seeks its elimination, aiming to substitute its own rule in the form of government ownership or state capitalism (euphemistically called state socialism, socialism or first phase of communism). Under this new system the new ruling class—civil servants, technicians, managers and other intellectual workers constituting the bureaucracy of the state—will enjoy privileged incomes, and to their offspring alone will be transmitted the higher educational opportunities and the resulting higher incomes. The workers will remain at the bottom of the social ladder, self-perpetuating, low waged "slaves of manual labor" just as under private capitalism. Intellectual workers (including the self-taught ex-workers) try to enlist the support of manual workers, winning their confidence by helping them in some of their struggles for better wages and by holding out as a new religion for modern slaves the socialist ideal of human brotherhood for future generations.

Machajski conceived of the emancipation of the working class not through the seizure of power as advocated by the socialist intelligentsia nor through anarchist or syndicalist methods but as a result of a revolutionary economic mass struggle. This struggle was to develop under the leadership of an international organization of conspirators as a succession of general strikes and uprisings for higher wages and for public works for the unemployed. When under the pressure of these economic struggles the private capitalists could no longer satisfy the growing demands of the workers, the state would take over industries, inaugurating state capitalism. The struggle for higher wages would continue against the bureaucracy of the socialized state, until equalization of wages for manual and intellectual work was achieved. This new condition would afford equal opportunities for higher education for all, thus bringing about a classless society.

Machajski called his theory neither socialism nor anarchism; his follower E. Lozinsky has suggested that it be called equalitarianism.

Under the official name of the Workers' Conspiracy groups professing Machajski's opin-

ions were formed in various Russian cities before and during 1905; their adherents, generally known as *Makhaevtsi* (followers of Machajski), conducted revolutionary activities chiefly among unskilled workers and the unemployed, devoting their energies exclusively to the wage struggle, which was to be extended to an economic general strike and to the demand for public works for the unemployed.

Machajski saw in the October revolution of 1917 along with elements of genuine working class revolt the ascent to power of the lowest strata of the middle classes, particularly the semi-intelligentsia and the self-taught ex-workers, who sought not to abolish economic inequality but only to increase the number of its beneficiaries. He considered that the manual workers could not have their own government so long as economic inequality condemned them as a mass to ignorance, and that it was therefore useless for them to endeavor to secure a better government than that of the Soviet state. They could, however, exert mass pressure upon the authorities, forcing them to seize or reduce all higher incomes, to increase wages of manual workers and to provide for the unemployed until all incomes had been equalized.

MAX NOMAD

Works: Umstvennii rabochii (The intellectual worker), 3 vols. (vols. i and ii first published "underground" in Siberia in 1898-99, vol. iii published in Geneva in 1904, new ed. published under the pseudonym "A. Volski" in 1905-06); *Bankrotstvo sotsializma XIX stoletiya* (Bankruptcy of the nineteenth century) (Geneva 1905); *Burzhuaznaya revoliutsiya i rabochee delo* (The bourgeois revolution and the workers' cause) (Geneva 1905); *Rabochii zagovor* (The workers' conspiracy) (Geneva 1908); *Rabochaya revoliutsiya* (The workers' revolution) (Moscow 1918); "Primechaniya perevodchika" (Notes of the translator) in Marx, K., and Engels, F., *Svyatoe semeistvo* (Holy family), 2 vols. (St. Petersburg 1906) vol. ii, p. 39-63.

Consult: Lozinsky, E., Chto zhe takoe, nakonets, intelligentsiya? (What, after all, is the intelligentsia?) (St. Petersburg 1907), and *Itogi i perspektivi rabochago dvizheniya* (Achievements and prospects of the labor movement) (St. Petersburg 1909); Ivanov-Razumnik, R. V., *Chto takoe "Makhaevshchina?"* (What is "Makhaevism?") (St. Petersburg 1908); Sirkin, L., *Makhaevshchina* (Makhaevism) (Moscow 1931); Nomad, Max, *Rebels and Renegades* (New York 1932) ch. v; *Obshchestvennoe dvizhenie v Rossii v nachale XX veka* (The social movement in Russia at the beginning of the 20th century), ed. by L. Martov and others, 4 vols. (St. Petersburg 1909-14) vol. iii, p. 523-33.

MACHIAVELLI, NICCOLÒ (1469-1527), Italian historian, statesman and political theorist. Machiavelli, who was born in Florence of a

noble but poor family, began his public career in 1498 as a clerk in the chancery of the Florentine republic. The following year he was appointed secretary to the Dieci di Libertà e Pace (Ten of liberty and peace) and in this capacity was sent on several missions to Italian and foreign courts. In 1502 he was sent to Cesare Borgia, who with the help of the French and papal troops was attempting to unite Romagna and The Marches under his rule. Machiavelli was almost an eye witness to the famous Senigallia ambush, in which Borgia had four chieftains of mercenary troops, who had deserted his side and been won back by false promises, strangled to death. He was greatly impressed by the words and deeds of Borgia and most probably derived from him the model for his *Il principe*. When the Medici with the help of Spanish troops reentered Florence and again became masters of the city, Machiavelli, who had remained faithful to the gonfalonier Soderini, was deprived of his secretarial position; and after some weeks of imprisonment he retired from public life. It was during this period of retirement, in 1513, that he wrote his most famous work, *Il principe*. In 1522 he succeeded in regaining to a certain extent the favor of the Medici. But in 1527, when they were overthrown and again banished, Machiavelli was charged with having received favors from them and was again eliminated from public life.

On Machiavelli and above all on his *Il principe* an entire literature has been written. Never has a writer been so extolled and so abused. He has been hailed by many as the true founder of political science; on the other hand, the term Machiavellism has become a synonym for craft and duplicity and for the prevalence of expediency over truth and loyalty whenever it is a question of aggrandizing a state or preserving its government. Machiavelli cannot, however, be properly understood unless he is regarded in the setting of the political conditions of his time.

At the end of the fifteenth century and at the beginning of the sixteenth Italy, split into a multitude of states, was from a military point of view very weak, since almost all the states had entrusted their defense to mercenary troops, and was continually invaded and devastated by French, Spanish, German and Swiss armies. No state was strong enough by itself to resist effectively France or Spain, and the mercenary troops had sufficiently proved their inferiority to the foreign armies. It was by observing these conditions and reflecting upon them

that Machiavelli was led to conclude that only by the creation of a great Italian state and through the organization of a national militia would it be possible to expel the foreigners beyond the Alps. Although it cannot be denied that in dedicating *Il principe* to the Medici he aimed to gain the sympathies of the new masters of Florence, it is none the less true that he intended at the same time to draw up a program for the guidance of that Italian prince who would determine to free Italy from foreign rule.

The chief weakness of Machiavellism is the striking contradiction between the abject character of its means and the nobility and loftiness of its goal. It is difficult to believe that a person capable of resorting to the vile stratagems of the petty Italian tyrants of the period should at the same time have possessed such greatness of mind as to adopt Machiavelli's patriotic program. And if it is true that the precepts of a most rigid morality cannot be observed in politics, it is no less true that politics is an art in which the sense of limits and proportion is of the greatest importance. It is for this reason that lies and disloyalty to achieve their purpose must be employed with great caution and parsimony. One discovered to be a habitual liar and a breaker of sworn agreements is not trusted. Elementary as these considerations are, they seem to have escaped Machiavelli's attention, a fact all the more strange since they were certainly not neglected by other Italian writers, such as Guicciardini and Scipio di Castro.

Machiavelli's maxims are nearly always based upon a pessimistic conception of human nature and are very often too general to be of much assistance in specific cases. Human beings are in part as he describes them—namely, "ungrateful, deceitful, cowardly, and greedy"; but even Machiavelli admits that this is not true of all human beings. Moreover he forgets to add that even those persons who resemble the portrait drawn by him are sometimes capable of a certain manifestation of altruism and generosity; and he fails to tell how to distinguish the so-called morally superior persons and how it is possible to profit from the small portion of goodness and loyalty that can be found even among morally inferior individuals.

The world wide fame and reputation of Machiavelli's ideas have been due to many factors, some of which are of a temporary and local and others of a permanent character. Among the former may be mentioned the bitter polemical discussions which took place in the second half of

the sixteenth century between Catholics and Protestants, in which each party accused the other of acting according to Machiavelli's principles: in a sense both parties were justified in their charges, since the Florentine writer professed on the one hand to be a Catholic and on the other hand displayed very little respect for the pope and the church. The Italians of the nineteenth century discovered in Machiavelli the precursor of the Risorgimento; similarly, his writings were popular among the leaders of the German national movement in the same century. Among the factors of more permanent character are undoubtedly the calm and cold objectivity with which Machiavelli describes the multitude of defects displayed by the human mind and the courage with which he points out the faults and vices of both the great and the humble, of the common people as well as of the classes that participate actively in political life. It is true that Machiavelli's conception of things and human beings is often inadequate, for he sees essentially only one side and nearly always the worse side of the extremely complicated nature of human beings. This side, however, he depicts with an incisiveness which impresses the reader in a singular manner and calls forth either great admiration or great repugnance and sometimes both.

Although Machiavelli claimed that his aim was to teach his fellow beings the art of deceiving and to prove to them the advantages and the necessity of lying, as a writer he was extremely sincere. He possessed to an exceptional extent that professional literary honesty which compels the author to convey to his readers his real opinions, without worrying over the success or failure of his work. He was honest in his private life and as an official; if he tried to dictate to others the rules of the art of deceiving in public life, he was himself by no means a political climber. Had he been a rogue and a self-seeker his public career would have been, in view of his talents, much more brilliant than it actually was; he would not have died in poverty, and he would have abstained from writing *Il principe*, for all true rogues know quite well that the first rule of their art consists in not revealing its secrets to others.

Other important works by Machiavelli were *relazioni* on his mission in France and Germany; *Discorsi sopra la prima deca di Tito Livio* (1521), in which he gave advice to republics and scrutinized the causes of ancient Roman grandeur; *Libro dell' arte della guerra* (1521), in which he confirmed the concepts already ex-

pressed in *Il principe* on the necessity for republics to have their own national militias; *La vita di Castruccio Castracani* (1532) and *Le storie fiorentine* (1532), interesting for the part in which he narrates the events occurring in the fifteenth century; and, finally, the *commedie*, often marked by obscenity, an unfortunate characteristic of the period, but not, however, without *vis comica*.

GAETANO MOSCA

Works: Opere, ed. by P. Fanfani, L. Passerini, and G. Milanese, 6 vols. (Florence 1873-77), tr. by Ellis Farnsworth, 4 vols. (2nd ed. London 1775); *Historical, Political and Diplomatic Writings*, tr. and ed. by C. E. Detmold, 4 vols. (Boston 1882). The best edition of *Il principe* is by A. L. Burd, with an introduction by Lord Acton (Oxford 1891), and the best English translation is that by N. H. Thomson (3rd ed. Oxford 1913).

Consult: Villari, Pasquale, Niccolò Machiavelli e i suoi tempi, illustrati con nuovi documenti, 3 vols. (3rd ed. Milan 1912-14), tr. by L. W. M. Villari, 2 vols. (London 1898); Tommassini, Oreste, *La vita e gli scritti di Niccolò Machiavelli*, 2 vols. (Rome 1883-1911); Oriani, Alfredo, *Fino a Dogali* (Bari 1918); Mosca, Gaetano, "Encore quelques mots sur 'Le prince' de Machiavel" in *Revue des sciences politiques*, vol. xlviii (1925) 481-509, and vol. xlix (1926) 5-27; Ercole, Francesco, *La politica di Machiavelli*, Politeia, vol. v (Rome 1926); Meinecke, Friedrich, *Die Idee der Staatsräson* (3rd ed. Munich 1929) ch. i; Hearnshaw, F. J. C., in *The Social and Political Ideas of Some Great Thinkers of the Renaissance and the Reformation* (London 1925) ch. iv; Allen, J. W., *A History of Political Thought in the Sixteenth Century* (London 1928) p. 447-94; Toffanin, Giuseppe, *Machiavelli e il "Tacitismo"* (Padua 1921); Schubert, Johannes, *Machiavelli und die politischen Probleme unserer Zeit* (Berlin 1927); Elkan, Albert, "Die Entdeckung Machiavellis in Deutschland zu Beginn des 19. Jahrhunderts" in *Historische Zeitschrift*, vol. cxix (1919) 427-58; Praz, Mario, *Machiavelli and the Elizabethans* (London 1928); Mayer, E. W., *Machiavellis Geschichtsauffassung und sein Begriff Virtù*, *Historische Bibliothek*, vol. xxxi (Munich 1912); Fueter, Eduard, *Geschichte der neueren Historiographie* (2nd ed. Munich 1925) p. 61-69.

MACHINE, POLITICAL. "Such words as 'boss' and 'machine' now imply evil," Theodore Roosevelt observed in his *Autobiography*, "but both the implication the words carry and the definition of the words themselves are somewhat vague. A leader is necessary; but his opponents always call him a boss. An organization is necessary; but the men in opposition always call it a machine." Roosevelt might have added that the boss generally claims the title of leader and that the machine, usurping the name as well as the thing, calls itself the party organization. Such facts are significant. They indicate that in popu-

lar usage the words have a derogatory implication, that the boss is looked upon as a perverted leader and the machine as a perverted organization. The test is one of motive and method. According to Ostrogorsky the men of the machine look out for themselves rather than for the party; according to Jeffe Macy their purposes are purely selfish and inconsistent with the public welfare. They are unscrupulous both in their use of political power and in the methods that are employed in gaining and holding it. They practise politics for profit.

The distinction suggested here in the contrast between public interest and private interest has been emphasized by the periodic revelation of abuses in municipal government, abuses which take the form of an alliance between politics and predatory business concerns and between politics and the criminal elements. But the term machine, like the term boss, is frequently employed without these sinister connotations. When newspapers spoke of the "Townley machine" in North Dakota or of the "La Follette machine" in Wisconsin they did not mean that either Townley or La Follette was personally corrupt or tolerated corruption in others. They were impressed by the fact that a particular group of politicians had established more or less permanent control over the Republican organization, enforcing such hierarchical discipline and moving with such relentless precision as to evoke the idea of a machine.

Obviously this term, like most political terms, can be defined on the basis of usage in a considerable variety of ways. Here it will be taken to mean a group composed mainly of professional politicians who gain and hold power by secret and often corrupt methods—although with a show of popular sanction—who dictate party nominations and appointments to public office and who set personal advantage above that of the party or the community.

Professional politics emerged in the era of Jacksonian Democracy, when the necessity of regimenting and mobilizing the newly enfranchised masses placed a great emphasis upon party organization. Politicians of a new type, proficient in the arts of management and scientific in their modes of action, rudely thrust aside the landed proprietors who had governed in the time of Hamilton and Jefferson. As early as 1823 Niles described them with infinite distaste as "persons who have little, if any, regard for the welfare of the republic, unless as immediately connected with, or dependent on, their own

private pursuits . . . " (*Niles' Weekly Register*, vol. xxxiii, 1823, p. 370). They disguised the essentially oligarchic character of their regime by flattering the voters while shrewdly manipulating them; and with the increase in the number of elective offices, which they made it their business to control, and with the application of the spoils system to the civil service they drew their sustenance from the public treasury.

There gradually took place a specialization of political functions. The people were engrossed in their private affairs, absorbed in the supreme task of conquering the continent and laying hold of its resources. They had, as Walter Weyl says, "neither leisure nor inclination for the drudgery of running the government. Consequently, the making of nominations, the control of elections, the divisions of spoils, and other profitable labor came to be the work of a despised ruler, the professional politician." Public service, like the continent, was appropriated for private gain. It should be observed of course that political activity and political power always and everywhere tend to become a monopoly of the few. Professor Michels in his study of *Political Parties* formulates an "iron law of oligarchy," having discovered that in Europe even among the socialists party decisions are made by a mere handful of the members, sometimes ludicrously small. What happened in the United States may be said therefore to illustrate a general law. But certain peculiarities of American politics must be explained in terms of the local environment.

In the first place, why should the oligarchy have tended to become so disreputable? Walter Weyl gives an answer. Politics was business, he says, but low grade business. "Not offering the boundless possibilities of other enterprises, it attracted a poorer quality of men. In De Tocqueville's day an American was not ordinarily intrusted with public business until he had signally failed in his private business." Perhaps one may hazard a further opinion. Great issues, which would rouse enthusiasm and command the loyalty of high minded men, have seldom marked the party conflict; in normal times the two major parties have faced each other without any fundamental divergence of policy. This situation may be attributed to the size of the country, the diversity of economic and other interests and the perpetual need of compromise as a basis for large scale cooperation. And so elections degenerate into a crude struggle for office, say the critics, and become attractive to the cupidity of the mere spoilsman. In the second

place, the apathy of "good citizens" and their willingness to abdicate in favor of the professional politician was due to something besides absorption in their own affairs. Politics became too complicated for the amateur. The absurd multiplication of elective offices, with short terms and rotation as a supposed safeguard against official arrogance, and the elaborate system of party primaries and conventions for making nominations gave the most conscientious voter a sense of frustration. He could not penetrate the technicalities; needing help he entrusted his baffling problems to the professional politician.

The rise of the machine must be connected also with a feature of American government which discourages the growth of effective and responsible leadership. The framers of the constitution, as Woodrow Wilson observed, set up the check and balance system "to keep government at a sort of mechanical equipoise by means of a standing amicable contest among its several organic parts." They distrusted power as dangerous to liberty; and therefore they spread it thin and erected barriers against its concentration. In our state governments, where the principal executive officers were elected and thus made independent of one another, this fatal weakness was still more pronounced; and these officers had been deprived by minute and specific statutory directions of all latitude in the discharge of their official duties. A similar dispersion of power marked local areas. As a consequence, when the people or particular groups among them demanded positive action, no one had adequate authority to act. The machine provided an antidote. There was built up, in the words of Herbert Croly, "a much more human system of partisan government, whose chief object soon became the circumvention of government by Law . . . The lawlessness of the extra-official democracy was merely the counterpoise of the legalism of the official democracy. The lawyer having been permitted to subordinate democracy to the Law, the Boss had to be called in to extricate the victim, which he did after a fashion and for a consideration" (*Progressive Democracy*, New York 1914, p. 254).

The boss is the kind of leader that the machine develops. He typifies its efficiency as an instrument of power, which in contrast to the arrangements in American states and municipalities objectifies the principle of concentration. His operations are facilitated, it is true, by certain more or less accidental conditions of American democ-

racy: the existence of the spoils system, the over-elaboration of electoral processes, the indifference of "good citizens," the pliability of the ignorant masses; and his opportunities for aggrandizement have been vastly enlarged during the past half century by his traffic with big business—he has become the broker, the indispensable intermediary in the purchase and sale of political privileges. But these various factors hardly make clear his essential function. The boss is the man who, like the prime minister abroad, brings together the scattered fragments of power. Leadership is necessary; and since it does not develop readily within the constitutional framework, the boss provides it in a crude and irresponsible form from the outside. His tenure is not affected by any doctrine of short terms and rotation; Penrose ruled Pennsylvania for fifteen years, Murphy ruled New York City for twenty years and Cox ruled Cincinnati for thirty years. The scope of his authority is not limited by minute prescriptions of law or by any scruples about the separation of powers: if he is a county boss he gives orders to the board of supervisors, to the district attorney and in fact to all public officers, including even judges.

Within the pyramidal structure of the machine there are big bosses and little bosses connected in a sort of feudal relationship. Their position depends ultimately upon their control of the party primaries, which they regard as more important than the subsequent elections. The boss of the assembly district or city ward holds his place only as long as he can dominate a majority of the precincts; and he maintains therefore intimate and mutually advantageous contacts with his subordinates, the precinct captains, whose success or failure in delivering the vote on primary day involves his own fortunes. It is often as precinct captain that the future boss gets his training and demonstrates his possession of the necessary qualifications. What he needs above all is the ability to handle men. "There's only one way to hold a district," according to George Washington Plunkitt of Tammany Hall; "you must study human nature and act accordin'" (Riordon, W. L., *Plunkitt of Tammany Hall*, New York 1905, p. 68). As captain he must be a friend to every man, assuming if he does not feel sympathy with the unfortunate and utilizing in his good works the resources which the boss puts at his disposal. He must be loyal; according to Plunkitt he is never justified in going back on his boss, "as long as the leader hustles around and gets all the jobs possible for his constituents"

(p. 68). The great test is efficiency. The boss rules by right of conquest and through the possession of those native qualities which are sufficient in themselves without any formal grant of authority.

The machine may extend its dominion over the whole state either through the ascendancy of a single boss or through the operations of a "ring" of local bosses who act in concert. Thus for three quarters of a century Pennsylvania was dominated first by the Camerons, father and son, then by Quay and finally by Penrose—an unbroken succession. As a rule, however, the county or the city is the unit. It is not incongruous for the ward boss to do homage to the city boss and to take orders from him. That feudal relationship serves the interests of both. The overlord fills a necessary role in coordinating the different parts of the machine and in opening up larger sources of patronage and perhaps of graft. For the same reasons a state boss may be able to impose himself upon the local bosses and machines, since it is his function to coordinate their activities in the larger field of state politics, to dictate and distribute nominations and appointments as well as executive and legislative favors. The logic of the situation suggests indeed that the machine should erect a structure paralleling the government in every political area. But with the size of the area the engineering difficulties increase. The state boss exists only by way of exception; what is usually found is a group or "ring" of local bosses whose uncertain and fluctuating control of the state government depends upon secret accommodations. There has never been a national boss. Nevertheless, the need of a unifying agency cannot be denied; and thus the phenomenon, met with more and more frequently, of a president or governor like Theodore Roosevelt with a big stick and a contempt for legalistic restraints.

The machine lives off the country like a conquering army. In its earlier period the spoils of office furnished the chief means of subsistence. There were, first of all, the numerous elective offices, which might be sold under the disguise of campaign contributions or given to faithful adherents as a reward for service and as a source of livelihood. Then, its ticket having triumphed, the machine applied to the civil service the principle of Senator Marcy that "to the victor belong the spoils." By giving his henchmen and heelers jobs that he could at any time take away the boss not only kept them in a state of dependence but replenished the treasury by levying a percentage

assessment upon their salaries. Patronage still remains a most important factor in the economy of the machine. But the offices are prized much less for the salaries attached to them than for their strategic value as a base of operations. In the decades following the Civil War new factors came into play. The rapid growth of cities afforded opportunities for pillage on a colossal scale, particularly in the awarding of public contracts and in the granting of franchises for public utilities. Tweed's accomplishments in New York and McManes' in Philadelphia differed in proportions but not in character from what was being done almost everywhere in the country. Eastern cities suffered most, because the hordes of immigrants settled there and reacted favorably to the shrewd benevolence of ward politicians. This was also a time of remarkable economic expansion. The great railway corporations and industrial monopolies pushed forward ruthlessly toward their objectives and by lavish corruption bought every sort of privilege and immunity. The machine now established its lucrative relationship with big business.

The tribute that the machine exacts from the community assumes such varied forms as to defy enumeration. It may fall within the category of what Plunkitt called "honest graft." Thus with private information that the city intends to widen a street or acquire a park or build a subway the politician buys parcels of land which will be condemned at a price fixed by friendly commissioners or which will soar in value when the improvements get under way. The tribute may, on the other hand, be derived from the protection and exploitation of vice and crime. This activity centers in the police department. While usually concerned with gambling, prostitution and the illegal sale of liquor it sometimes involves an alliance with racketeers and gunmen. But what the police do in permitting violations of the law is characteristic of all branches of administration which can exercise a similar discretion. The district attorney and even the magistrate, being creatures of the machine, may acquiesce in monstrous perversions of justice. The tax assessor may levy blackmail by threatening a rigorous search for hidden personal property. The building inspector may fasten upon the most insignificant violations of the code or for a consideration close his eyes to the most glaring and pernicious. When very large sums are involved, as in the erection of a great hotel or apartment house, the bribery of the building de-

partment may be ingeniously disguised; somehow a certain law firm—notoriously high in its charges for the service—can always secure a relaxation of vexatious requirements. Not the least flagrant abuses are connected with the letting of public contracts. An insider can safely underbid his competitors if he knows that the elaborate safeguards of the law will be ignored, that specifications regarding the materials to be used will not be enforced, that time clauses will be waived and that fraudulent claims will be paid without investigation. This explains the role of the machine politician as sleeping partner in some contracting firm. City councils and state legislatures have profited by blackmailing as well as by serving corporations; blackmail is paid in return for the withdrawal of a measure that has been introduced solely for the purpose of extortion.

The depredations of the machine growing bolder with increased opportunities gradually aroused popular resentment and indignation; and since the parties did little or nothing to purify themselves, an attempt was made to exorcise the devils of corruption by statute. First came civil service reform, which by applying the merit system to appointive offices robbed the victor of his spoils. Unfortunately the reform commended itself to few of the states; and therefore the results were disappointing. Next came the introduction of the Australian ballot. It was expected to stop the intimidation or bribery of voters and to encourage independent candidatures by reducing the cost of elections. But since the form of the ballot diverging from its Australian prototype facilitated the voting of a straight ticket, the machine suffered little damage from the change. The first reform had aimed at starving the victorious machine; the second at reducing its advantage in the election, its means of victory. The third reform went behind the election and regulated the nominating processes. The direct primary took the place of the delegate convention. At the same time in the hope of displacing the oligarchy of professional politicians and restoring power to the rank and file the parties were deprived of their voluntary character and subjected to drastic statutory regulation. Other weapons were placed in the hands of the people: the initiative and referendum, which gave them a direct control over legislation; and the recall, which allowed them to sit in judgment on their elected officers in the interval between the all too frequent regular elections.

These later reforms have a common character-

istic which invites criticism. Instead of simplifying the labyrinth they have added to its complexities. The harassed voter is not only confronted with a preliminary campaign of election within the party but also asked on the day of the general election to express an opinion on all sorts of legislative measures. He has become therefore still more inadequate, still more dependent on the specialist of the machine for guidance. The officials of the party are now entangled, like the officials of the government, in a web of legalistic restrictions, from which presumably they must wait for the boss to extricate them. The escape from machine politics lies not in this direction but in simplifying structure and processes and in concentrating power and responsibility. If the grip of the machine has been loosened somewhat, the improvement must be attributed to factors which have raised the tone of business as well as politics and to technical improvements in administration. Public opinion

stimulated by innumerable civic organizations has become more alert, while systems of cost accounting and settled forms of procedure act as a bar to some of the grosser forms of fraud.

EDWARD MCCHESENEY SAIT

See: PARTIES, POLITICAL; PUBLIC OFFICE; SPOILS SYSTEM; CORRUPTION, POLITICAL; ELECTIONS; PRIMARIES, POLITICAL; CAMPAIGN, POLITICAL; CONVENTIONS, POLITICAL; VOTING; CAUCUS; FACTION; CLUBS, POLITICAL; REFORMISM; CIVIL SERVICE; INDEPENDENT VOTING.

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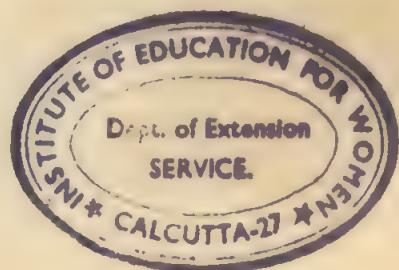
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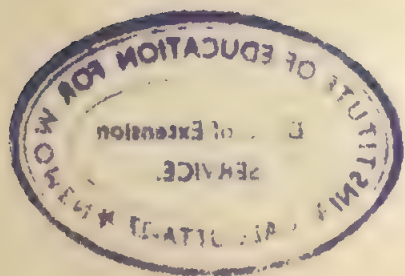
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MACHINERY, INDUSTRIAL. The machinery industries as a whole comprise the manufacture of all contrivances, implements and apparatus, including accessories, which operate mechanically when driven by animal, human or motor power. The perpetual problem of these industries is the creation of mechanical equipment whose production and subsequent operating and maintenance costs shall be as low as possible, imposing a twofold application of the economic principle of maximum efficiency. Accordingly the machinery industries affect every other industry not only as purveyors of production equipment but above all in the organization and construction of plants. Industry (including agriculture, transport and communication) is dependent upon the machinery industries and the increasing efficiency of their products and of modern machine technology. Thus these industries alongside the production of raw materials occupy a position of pivotal and universal importance in the economic life of the present age. Upon the machinery industries moreover depends national economic power. Their direct economic importance is also great; in the United States in 1929 the output of the machinery industries (including electrical machinery but exclusive of locomotives and other transport equipment) amounted to \$6,964,000,000, one tenth of the total industrial output, and employed 1,093,485 wage earners, one eighth of all wage earners engaged in manufacturing.

Despite their essential unity the machinery industries are characterized by a great diversity of output. This is true not only of the different divisions but also of single establishments, which frequently manufacture a variety of products. The machinery industries may be grouped into five major divisions—agricultural machinery (*q. v.*), electrical manufacturing industry (*q. v.*), industrial machinery, locomotives and office and household appliances. There is some overlapping; thus household appliances constitute a considerable part of the output of electrical manufacturing. While these divisions are pertinent, there is no recognized international classification of machinery; in particular the term

industrial machinery is in use only in the United States. Industrial machinery includes all machines and accessory equipment used directly in industry (in the production of either consumers' or producers' goods) with the exception of electrical machinery, which has long since become an independent industry but is itself an important market for industrial machinery. It embraces prime movers, including all types of engines; metal working machinery and machine tools, including milling and bending machines, lathes, drills and presses; textile machinery; woodworking machinery, including cutters and planers; auxiliary machinery, including pumps, compressors, blowers and refrigerating apparatus; hoisting equipment, including cranes, derricks and elevators; dredging, excavating, road making and building construction machinery; baking, shoe, laundry and paper and printing machinery; mining and oil well machinery and machinery for smelter, steel and rolling mills as well as apparatus for use in the chemical industries.

In the United States in 1929 the value of output in the machinery industries amounted to \$6,964,000,000 divided as follows: industrial, \$3,917,000,000; electrical, \$2,273,000,000; agricultural, \$278,000,000; household and office, \$494,000,000. Since the World War the output of household and office machines has increased much more rapidly than that of agricultural machinery. These two divisions play a more important part, in both production and export, in the American machinery industries than in those of other major producing countries. Industrial machinery constitutes the largest group, particularly in other countries, where the output of agricultural, electrical and business machines is absolutely and relatively much smaller than in the United States.

As the term industrial machinery is used only in American literature, and as the various types of machinery are so classified in the statistics of different countries as to render difficult an adequate distinction between industrial and other machinery, international comparison of production, employment and foreign trade can be only approximate, including other than industrial

machinery. Comparative figures on this basis yield a different picture of the distribution of world machinery production and exports from that which would be presented by corresponding figures limited to industrial machinery. The German statistical classification, however, which excludes electrical machinery and boilers but includes locomotives, agricultural machinery and household and office appliances, may be taken, for international comparative purposes, as roughly equivalent to industrial machinery.

Domination of modern economic life by the machine, one manifestation of which is the tremendous variety of machines and of industries producing them, is of comparatively recent date. The modern machinery industries arose after the perfection of the steam engine in 1781 by James Watt, who succeeded in combining the steam piston with a crank mechanism, transforming reciprocating into rotary motion. The steam engine became a prime mover that could be employed anywhere, rendering the operation of machinery independent of manual effort and of natural forces bound by time and place. It was both preceded and followed by other British inventions which were indispensable in the development of machinery. The use of coke in blast furnaces improved the smelting process and yielded a better and cheaper cast iron, the indispensable material in the production of the newer types of machinery. Improvements in machine tools together with steam engine drive made possible more efficient metal working, an indispensable prerequisite in the construction of modern machinery. Metal working was further improved by the introduction of steam hammers, hydraulic presses and mechanical rolling mills. Iron and steam became the basis of the development of machinery and of the industrial revolution. The first important application of the new machine technology was in the English textile industry. In 1779 Crompton invented the spinning mule and made possible automatic mechanical spinning. Mechanical weaving, developed by Horrocks, followed in 1803; improvements were added by Roberts in 1822 and many other textile machines soon followed. The introduction of machinery into other branches of manufacturing was slower but equally steady.

The revolution in machinery was accompanied by a revolution in the methods of constructing machines. Older types of machines, composed mainly of wood, were constructed by handicraft labor. The new machines, composed of iron and other metals, necessitated the development and

construction of a whole series of other machines for their production. This necessity made increasingly large technical and economic demands upon the industry, particularly as machines grew in size and complexity. The progress of the machinery industries is bound up with the engineering and economic problems involved in the construction of machinery for the production of machines.

At the beginning of the nineteenth century Great Britain was the undisputed leader in the production of machinery. It endeavored to retain this position by all possible means, including prohibition of the export of machinery (particularly textile machinery), tools, models and plans and of the emigration of engineers and skilled workmen; a series of such prohibitory laws initiated in 1774 were not finally repealed until 1845. The prohibitions were ineffectual in preventing the dissemination of British inventions. The United States, less affected by the flood of British goods because of its remoteness from Europe and hence forced to rely upon the development of its own industry, soon adopted Great Britain's technological advances and improved upon them. The huge domestic market in the continually growing territory of the United States took the place of Great Britain's export markets and promoted the construction of many types of machinery, particularly after the adoption of the 1828 tariff. Despite its own early contributions, for example, the invention of the steamboat, the United States depended upon technical borrowing from Europe in the development of its machinery industries. In the numerous small shops of New England there grew up a considerable manufacture of industrial machinery, especially textile and woodworking machines. By 1840 locomotives were being extensively constructed. While American manufacturers borrowed on a large scale they made considerable improvements in the models they adopted, particularly in interchangeable and automatic mechanism for metal working machines, which gradually surpassed the European.

Germany, France and Belgium also followed Great Britain along the path of industrialization. In Germany, which later became the chief competitor of the British and American machinery industries, the Napoleonic wars and the temporary exclusion of British competition during the continental blockade aided technical development, but after the lifting of the blockade British industry proved its superiority by the flood of goods which it poured into Germany. Germany's

technological progress was also retarded by the political dismemberment of the country, which blocked communication and free access to markets. The abolition of the Prussian internal duties in 1818 and the formation of the German Zollverein in 1834 enormously facilitated the growth of commerce and industry. Germany, however, had early adopted the British models of the new machine technology in various fields of production (the first German steam engine was built in 1785) and developed new types of machines, such as the first mechanical printing press (invented in 1810).

The new machine technology was given a tremendous impetus by developments in transportation. Stephenson built the first practicable steam locomotive in Great Britain in 1829, and shortly afterward the first railroad was opened. The United States followed immediately, independently of Great Britain; Germany did not begin its first railroad until 1835. The construction of locomotives and railroads made the greatest demands upon the machinery industries and was of the utmost importance in their technical and economic growth. The extremely rapid and intensive development of transportation accelerated the process of industrialization begun with the invention of the steam engine and introduced a new epoch of economic growth in all branches of industry and trade, with the machinery industries supplying the necessary technical equipment. Great Britain and the United States still led in machine construction. In 1845 only 15 percent of the locomotives used in Germany were built at home; most of them were imported from Great Britain, while the remainder came from Belgium and the United States. Even in 1857 only 57 percent of Germany's locomotives were of domestic origin, 30 percent coming from Great Britain and 13 percent from the United States and Belgium.

The objective conditions for the development of the modern capitalist system were created by the great inventions in machine technology, particularly efficient prime movers, by the improvement in the production and utilization of iron, by the progressive mechanization of production processes and, finally, by the liberation of hitherto unknown transportation facilities on land and sea. These developments were bound up with the lowering of production costs by the use of continually improved production methods, the consequent decline in commodity prices and the increase in sales, the growth in real income, the opening of new markets, the growing competi-

tion in all the fields of production and the rapid rise of population, which combined to insure an almost uninterrupted progress of industrialization. This trend was not confined to industrial activity. In the United States the extremely low density of population led at a very early date to the employment of machinery in agriculture. In Great Britain the country's large capital resources and the existence of great landed estates encouraged the use of agricultural machinery, while the availability of a large and cheap labor supply temporarily kept the machine out of agriculture in Germany, France and other continental countries. Because of its exceptional geographical conditions the United States took the lead in the manufacture and use of agricultural machinery; it still dominates in this field.

It is impossible to describe here the technological evolution of the many kinds of industrial machinery in use today (see MACHINES AND TOOLS). It was the result of increased competition among the chief producing countries and of their need for special machinery adapted to the requirements of each country as well as of the general trend toward industrialization. Thus the first sewing machines were invented in the United States together with special woodworking machinery, machinery for the manufacture of shoes and leather and the first typewriters. American machine tools were developed to a high stage of perfection, surpassing those of Great Britain and Germany, with the introduction of series manufacture (and later of mass production) in the manufacture of machinery. Modern methods of manufacture, division of labor, specialization and standardization led to the construction of special precision machine tools in the United States. By 1867 American machines were noted for their originality, although British types were still standard and Great Britain maintained its lead in the manufacture of heavy engineering machinery and of machine tools for shipbuilding. The design and construction of machinery were revolutionized by new processes of steel manufacture originated in Great Britain and Germany. New types of prime movers arose in the years 1865 to 1900 to compete with the steam engine, leading to new technological advances—the electric dynamo, which paved the way for the modern electric motor, the gas engine, the gasoline engine and the Diesel oil engine. Electric drive for all types of machinery characterized the new developments in machine construction, resulting in a rapid electrification of industry.

These and other advances in machine technology arose out of the needs of industry, agriculture and transportation; the former in turn reacted upon the latter, aiding their development. Within the space of a hundred years there was an unparalleled economic growth in the three leading industrial countries, interrupted only by recurring periods of cyclical depression. The territory of the United States spread from the Atlantic to the Pacific forming a vast internal market. The Civil War had an extraordinary influence on the machinery industries because of its huge war requirements and the political stimulus which it gave to the development of industrial capitalism. Within a few years one industry after another was mechanized and new industries were called into being. The complete mechanization of the manufacture of boots and shoes was symptomatic of the general trend. Iron and steel production increased enormously in response to the increasing demand for machines and other metal products, while improved metallurgical methods made necessary more and newer types of machines. The development of electricity called for new types of machines and a whole new industry to produce them. One important aspect of American machine production

was the emphasis upon standardized and interchangeable parts. By 1913 the United States led the world in the quantity and quality of its machines, its output of industrial machinery alone amounting approximately to 50 percent of the world output (Table I).

American machinery exports, negligible before the Civil War, began by 1875 to loom as a competitor in the European market. Penetration of the far eastern market began with the completion of the first transcontinental railroad in 1869. American exports consisted mainly of machines and tools manufactured on a mass production basis and specially adapted to the needs of other countries, such as agricultural machinery, machine tools, firearms, sewing machines, locomotives, stationary engines and sugar mills (the latter went particularly to Cuba, where sugar production was coming under the domination of American interests). The United States, however, was a comparatively unimportant exporter. Great Britain, on the contrary, expanded its export trade enormously on the basis of its technological leadership in machine construction and consolidated its historical position as an importer of raw materials and an exporter of manufactured goods. Germany's eco-

TABLE I
OUTPUT OF MACHINERY, 1913-25*

COUNTRY	VALUE OF OUTPUT					WORKERS EMPLOYED			
	1913		1925			1913		1925	
	AT CURRENT PRICES (IN \$1,000,000)	PERCENTAGE	AT CURRENT PRICES (IN \$1,000,000)	AT 1913 PRICES (IN \$1,000,000)	PERCENTAGE	NUMBER (IN THOUSANDS)	PERCENTAGE	NUMBER (IN THOUSANDS)	PERCENTAGE
United States	1612	50.0	3021	2015	57.6	620	32.8	582	28.3
United Kingdom	381	11.8	715	478	13.6	330	17.4	500	24.4
Germany	666	20.6	697	460	13.1	460	24.3	452	22.0
France	63	1.9	123	82	2.4	45	2.4	85	4.1
Russia	113	3.5	96	64	1.8	130	6.9	98	4.8
Austria-Hungary†	109	3.4	79†	53	1.5	80	4.2	66	3.2
Switzerland	36	1.1	67	45	1.3	42	2.2	45	2.2
Italy	42	1.3	61	41	1.2	30	1.6	35	1.7
Sweden	29	0.9	40	27	0.8	25	1.3	20	1.0
Belgium	37	1.1	38	26	0.7	24	1.3	25	1.2
Other European countries	32	1.1	57	38	1.1	30	1.6	40	1.9
Canada	76	2.4	169	112	3.2	40	2.1	40	1.9
Japan	11	0.3	51	34	1.0	20	1.1	47	2.3
Oceania	18	0.6	36	24	0.7	15	0.8	20	1.0
World total	3225	100.0	5250	3499	100.0	1891	100.0	2055	100.0

* The table excludes electrical machinery and boilers.

† Data for 1925 cover Austria, Hungary and Czechoslovakia.

‡ Includes \$26,000,000 for Austria, \$14,000,000 for Hungary and \$39,000,000 for Czechoslovakia.

Source: International Economic Conference, *Mechanical Engineering*, League of Nations, Publications, 1927. II. 6, 2 vols. (Geneva 1927) vol. I, p. 30, 33.

economic growth was comparatively slow until after the achievement of national unity in 1871, but its subsequent rapidity compensated for the late beginnings. In 1868 for the first time the German foreign trade in machinery showed a favorable balance and thereafter, with the exception of the period from 1873 to 1875, the balance continued to be favorable.

The American, British and German machinery industries differed considerably in their technological and economic development. In the United States and Great Britain factories early began to specialize in the production of particular types of machines, for which there was an assured demand either in the large American domestic market or in the export trade of Great Britain and its colonies overseas; consequently competition in these countries between similar machinery products was not very keen. In Germany, however, a large number of manufacturers of machinery not only felt the pressure of foreign competition but had to share a comparatively limited domestic market; hence most of them were compelled to adopt an inclusive program of manufacture covering a wide variety of machine products. The consequent keen competition led to underbidding and the necessity of accepting high priced special orders. But it also acted as a powerful stimulus to technical progress

and the improvement of machinery. In the United States and Great Britain concentration on specialized products made possible mass production yielding lower costs and higher profits. Only during the second half of the nineteenth century (as a serious competitor only after 1900) did the German machinery industries enter the world market to obtain new outlets. Germany concentrated on theoretical research and the scientific design of machinery, while British machine construction and for a long time the American as well were guided largely by empirical knowledge. Engineering education and the training of skilled workers were first extensively developed in Germany and constituted an important factor in the growth of its machinery industries. One of the reasons for the final superiority of Germany and the United States over Great Britain in machinery construction at the beginning of the present century was the backwardness of Great Britain in technical science and factory organization and management.

Increasing industrialization in economically backward countries as well as the demand for special types of machinery in the more industrialized countries led to a great increase in the foreign trade in machinery. In 1890 Great Britain was the major exporter, followed by the United States and Germany (Table II); the last

TABLE II
VALUE OF EXPORTS OF MACHINERY, 1913-29

COUNTRY	1913		1925			1929		
	AT CURRENT PRICES (IN \$1,000,000)	PER- CENT- AGE	AT CURRENT PRICES (IN \$1,000,000)	1913 PRICES (IN \$1,000,000)	PER- CENT- AGE	AT CURRENT PRICES (IN \$1,000,000)	1913 PRICES (IN \$1,000,000)	PER- CENT- AGE
United States	162	26.8	305	203	34.8	481	351	35.7
Germany	176	29.0	175	117	20.0	340	248	25.2
United Kingdom	172	28.4	214	143	24.4	264	193	19.6
France	18	3.0	40	27	4.6	68	50	5.1
Austria-Hungary*	7	1.1	23	15	2.7	33	24	2.4
Italy	4	0.7	6	4	0.7	10	7	0.7
Belgium	15	2.5	14	9	1.6	20	15	1.5
Switzerland	15	2.5	30	20	3.4	40	29	2.9
Sweden	12	1.9	21	14	2.4	28	21	2.1
Other European countries	13	2.3	24	16	2.8	35	26	2.6
Canada	9	1.5	18	12	2.1	23	17	1.7
Japan	1	0.2	3	2	0.3	5	4	0.4
Oceania	1	0.1	1	—	0.2	1	—	—
World total	605	100.0	874	582	100.0	1348	985	100.0

* Exclusive of electrical machinery and boilers.

† Data for 1925 cover Austria, Hungary and Czechoslovakia.

Source: The figures for 1913 and 1925 are from International Economic Conference, *Mechanical Engineering*, League of Nations, Publications, 1927. II. 6, 2 vols. (Geneva 1927) vol. I, p. 46. The figures for 1929 are compiled by author from official sources; the "1913 prices" are obtained by using as a divisor 137, the 1929 value for the index compiled by the British Board of Trade.

named imported half as much machinery as it exported and Great Britain about one sixteenth, while the American imports were negligible, a noteworthy result of technical and price superiority. For the five years from 1901 to 1905 exports by the United States of machinery of all types averaged \$77,950,000 yearly. But while the United States was cutting down Great Britain's lead, Germany cut down the lead of both, overtaking first the United States and then Great Britain and becoming the leader in the world machinery market. In 1913 Germany led the world with 29 percent of total world exports of industrial machinery, while Great Britain followed with 28 percent and the United States with 27 percent. The three chief producing countries increased their total share of such machinery exports from 79 percent in 1890 to 84 percent in 1913. But their competitors also considerably increased their exports and new competitors arose in Sweden, Switzerland, Canada and Holland. Great Britain, the pioneer of the machinery industries, reached in 1907 the peak of its machinery exports, which thereafter remained relatively stationary, while the exports of the United States and Germany rose uninterruptedly except in 1909, a year of general cyclical crisis. In the years immediately preceding the World War Germany not only took the lead in exports but imported fewer machines than Great Britain.

While the three major producing countries exported an approximately equal volume of machinery, the relation of these exports to total national production varied considerably; in 1913 Great Britain exported 45 percent of its machinery production, Germany 26 percent and the United States only 10 percent. Of the total world output of machinery the United States produced 50 percent, Germany 20 percent and Great Britain only 12 percent (Table 1), a complete shift since the earlier years of the nineteenth century. Productive efficiency also varied considerably. In 1913 there were employed in the world's machinery industries 1,900,000 workers, 33 percent of whom were in the United States, 24 percent in Germany and 17 percent in Great Britain; annual output per worker amounted to \$2750 in the United States, \$1525 in Germany and \$1210 in Great Britain. The American lead in both output and efficiency was an expression of the intensive mechanization of industry and the increasing adoption of mass production and specialization.

Other countries were of minor importance in

the production of machinery. There was an appreciable output only in Russia, Austria-Hungary, Canada, France, Italy, Switzerland, Belgium and Sweden. The chief manufactures of the minor producing countries were the usual types of prime movers and machine tools and the simplest kinds of industrial machinery. A high degree of efficiency prevailed only in a few special branches, such as agricultural machinery in Canada and France, special textile machinery in Switzerland, locomotives and mining machinery in Belgium and dairy machinery and ball bearings in Sweden. The output of all the minor producing countries combined amounted to only 18 percent of the world's production of machinery in 1913, but they employed 26 percent of the wage earners engaged in the world's machinery industries. An extremely large proportion, about 50 percent, of the wage earners employed in the machinery industries are highly skilled. In 1913 approximately 2,300,000 persons were engaged in the machinery industries; of these 82 percent were wage earners and 18 percent clerical, technical, supervisory and executive employees.

Industrial machinery constituted the overwhelming bulk of the output of the machinery industries in the earlier stages of their development. After 1875, however, electrical machinery constituted an increasingly large proportion of the output of machines, particularly in the United States and Germany, until it became almost as important as industrial machinery. The output of household and office machines also increased steadily, the largest growth being in the United States.

As a result of the World War the relative importance of the different machinery producing countries changed considerably. The enormous demand for war materials in all the belligerent countries led to the erection of numerous new machinery plants. Moreover the war resulted in a pronounced decrease of machinery exports; Germany was practically excluded from the world market, while American and British exports also declined sharply. In consequence the newer industrial countries, such as Japan, Canada, Australia, British India and others, began to provide for their needs by developing their own machinery industries as well as industries producing consumers' goods, thus attempting to become independent of the necessity of importing manufactured goods. These developments must ultimately bring about a reduction in the machinery sales of the older industrial countries, both in

export markets and to their own manufacturing industries.

Recent international comparative data covering machinery construction are available only for 1925. But since then the relative ranking of the several nations has changed but little; only the ratio of production to capacity fluctuated considerably. From 1913 to 1925 the world production of machinery, excluding electrical and some other types of machines, rose about 10 percent—from \$3,225,000,000 to \$3,500,000,000 in pre-war prices (or \$5,250,000,000 in current prices). This, however, assumes a 1925 price level of 150; a decline would be shown by the use of a higher price level as suggested by some authorities. Output rose considerably after 1925; if electrical and all other types of machines are included, the world's output of machinery in 1929 exceeded \$10,000,000,000. The world's production capacity, however, rose 45 percent during the same period, assuming that in 1913 production equaled capacity. This 45 percent rise in capacity, accompanied by an increase of only 10 percent in production, necessarily resulted in sharply intensified international competition. The United States and Great Britain both increased their production 25 percent, while Germany's production in 1925 attained only 70 percent of its 1913 value. The share of the United States in world production rose from 50 to 58 percent and of Great Britain from 12 to 14 percent, while Germany's dropped from 21 to 13 percent. An analogous development characterized the production capacity of these countries. The American capacity rose 67 percent and the British 44 percent, while the increase for Germany and the other producing countries was only 20 percent. In percentages the world's production capacity in 1925 as contrasted with that in 1913 was distributed as follows: United States, 57 and 50; Great Britain, 12 and 12; Germany 17 and 20.4; all the other producing countries, 14 and 17.6. In 1925 only 75 percent of capacity was utilized in the United States, 87 percent in Great Britain, 58 percent in Germany and 80 percent in all the other producing countries combined. In 1925 the United States continued to export 10 percent of its total production, while Great Britain's exports dropped to 30 percent as compared with 45 percent in 1913 and Germany's remained constant at 25 percent. The changed situation after the war and the trend toward the increased production of machinery industries by countries other than the three major producers are reflected in the

rise of 50 percent in machinery production in Canada, 39 percent in France, 25 percent in Switzerland, 200 percent in Japan and 35 percent in Australia.

Of the three major producing countries the United States made the greatest progress in capacity and production combined. The output of all types of machinery rose from \$1,582,000,000 in 1914 to \$4,727,000,000 in 1923 and to \$6,964,000,000 in 1929. The output of industrial machinery rose from \$978,064,000 in 1914 to \$3,917,782,000 in 1929, of electric machinery from \$335,170,000 to \$2,273,000,000, of agricultural machinery from \$164,087,000 to \$278,539,000 and of all other types from \$105,087,000 to \$494,956,000, electrical machinery scoring the largest relative increase. The growth in the American industrial machinery industry is shown in Table III.

TABLE III
GROWTH OF AMERICAN INDUSTRIAL MACHINERY INDUSTRY, 1914-29

CENSUS YEAR	NUMBER OF ESTABLISHMENTS	NUMBER OF WAGE EARNERS	VALUE OF OUTPUT	TOTAL WAGES
			IN \$1000	
1914	11,392	405,422	978,064	274,432
1919	12,483	666,979	3,200,184	856,442
1923	9,848	586,994	3,009,118	834,416
1925	9,445	537,080*	2,998,260*	790,489
1927	9,653	544,289	3,103,162	810,572
1929	10,476	648,229	3,917,782	992,678

* These figures for 1925 do not correspond with the figures in Table I because of differences in classifications.
Source: Compiled from United States, Bureau of the Census, *Biennial Census of Manufactures 1921-27* (1924-30), and *Census of Manufactures, 1929: Summary by Industries* (1930).

The following statistics for 1929 yield an indication of the output and relative importance of the major categories of American industrial machinery: engines, \$460,003,000; machine tools, \$184,208,000; pumps and pumping equipment, \$153,347,000; textile machinery, \$115,525,000; oil well machinery, \$89,067,000; refrigerating and ice making machinery, \$65,757,000; dredging and excavating machinery, \$60,745,000; cranes, including hoists and derricks, \$57,840,000; metal working machinery (other than machine tools), \$53,300,000; conveying machinery, \$48,537,000; elevators and elevator machinery, \$44,044,000; mining machinery, \$40,325,000; woodworking machinery, \$35,151,000; air compressors, \$33,317,000; road making machinery, \$30,694,000; paper and pulp ma-

chinery, \$30,456,000; laundry machinery, \$28,893,000; meters, \$25,135,000; blowers and fans, \$23,455,000; baking machinery, \$21,730,000; cement and concrete machinery, \$19,924,000.

In 1929 more than half the world's output of industrial machinery was produced in the United States, and the proportion becomes greater if all types of machinery are included; thus the United States in 1929 produced \$2,273,000,000 of electrical machinery, Germany in 1928-29 produced nearly \$1,000,000,000 and Great Britain in 1928 produced \$400,000,000. In 1929 the American industrial machinery industry employed 648,229 wage earners, a decline of 18,750 over 1919 although production had greatly increased during the decade, indicating a substantial gain in output per worker. For the machinery industries as a whole the number of wage earners rose from 618,737 in 1914 and 998,484 in 1919 to 1,093,485 in 1929. Average yearly earnings of wage earners in the industrial machinery industry rose from \$1430 in 1923 to \$1530 in 1929, an increase based on the higher productivity of labor; the average is considerably higher than for manufacturing as a whole, indicating the larger employment of skilled workers. While the productivity of American labor has increased considerably since 1913, productivity in Great Britain and Germany has been practically stationary and may have declined. The productivity of the American worker in the machinery industries is perhaps three times as high as that of the European worker. This is another indication of the high degree of mechanization in the United States, partly a result of higher wages; in Europe this development is retarded by cheaper labor. Wages in the American machinery industries have not, however, increased as much as has output per worker.

One of the characteristics of the machinery industries is the comparatively high elaboration involved in their manufacturing processes. In the United States this expresses itself in the high proportion of "value added by manufacturing" to total value of output, ranging as high as 60 percent, which is considerably higher than the average for manufacturing as a whole. Except in electrical manufacturing, where an unusually high degree of concentration prevails, another characteristic is the relative lack of concentration, due to the great variety of products manufactured by the industrial machinery industry. Yet even here concentration is increasing; thus the number of establishments declined from 12,483 in 1919 to 10,476 in 1929—fewer than in

1914. Competition is relatively keen among producers of industrial machinery, only 10 percent of whom are organized in trade associations. Profits since the war have been high, with the exception of course of the depression years 1921, 1922, 1929 and those following; for the period as a whole average profits amounted to 10 percent.

The World War played an important part in the rapid growth of the American machinery industries, which were also enabled to invade foreign markets formerly dominated by Great Britain or Germany. American progress continued after the war aided by the growth of new industries, such as radio and aviation; by the unusual expansion of old industries, such as automobiles and electric power; and by the impetus to more intensive mechanization of all production processes in order to save labor and reduce production costs. The American machinery industries grew to their present size under the stimulus of an unparalleled mechanization of production processes. In the United States approximately \$25 worth of machinery per capita is annually installed, compared with \$10 worth in Great Britain and \$9 worth in Germany.

Although Great Britain's machinery production was 25 percent higher in 1925 than in 1913 and capacity 44 percent higher, the British machinery industries were stagnant because of relative economic decline, overcapitalization, the multiplicity of small firms unable to operate efficiently or profitably and the intensification of American and renewal of German competition in foreign markets. In addition the British machinery industries are not organized into trade associations and are thus unable to defend their interests collectively and energetically. The most important cause of stagnation, however, is the fact that Great Britain has fallen behind in the march of technological progress; its machinery industries lack adequate modern facilities in both technical equipment and production methods. This was clearly revealed not only by the revival of foreign competition and the decline of British exports but also by Great Britain's extraordinarily increased demand for foreign machinery, which (on the basis of pre-war prices) was twice as high in 1925 as in 1913. Whereas Great Britain buys large amounts of machinery in the United States and Germany, these countries purchase comparatively trifling amounts from Great Britain. Without the aid of its markets in the dominions and colonies the British decline in machinery exports would have been greater. Finally, the decline in exports of

manufactured goods, which are of crucial importance to the economy of Great Britain, involved an additional blow to its machinery industries. The Committee on Industry and Trade (Balfour Committee), which reported that the net profit (on paid up capital) of twenty-seven machinery companies sank uninterruptedly from 11.8 percent during the period from 1911 to 1913 to 4 percent in 1925, declared that only the increasing adoption of mass production and improved technique could insure future progress.

During the World War Germany increased its production facilities by 20 percent, but in 1925 its production was only 70 percent of the pre-war level. By 1929 its production had risen to over \$1,000,000,000, about equal to the pre-war output. The period of moderate inflation down to the close of 1922 favored machinery sales both at home and abroad, but when German firms again adopted gold prices after the stabilization crisis a sudden slump occurred; machinery had become too expensive for both the domestic and foreign markets. A slight recovery in 1924-25 was followed by a renewed slump in 1926 as a result of the economic crisis. In 1928-29 the output of Germany's machinery industries was twice as high as in 1926. Employment reached 80 percent of normal during 1928. In the ensuing period of decline machinery exports were forced to compensate for the reduced domestic market. Averaging 26 percent of total production for the years from 1921 to 1927, exports rose to 34 percent in 1929, 42 percent in 1930 and probably over 50 percent in 1931. Machinery sales and profits moreover were greatly reduced by excessive domestic competition and insufficient specialization of production in definite types of machinery. In 1913 German machinery corporations made an average profit of 10 percent on their capital. In 1925-26 this average profit rate was only 1.76 percent as compared with 2.26 percent for all industrial enterprises. By 1926-27 the rate of profit had dropped to 0.21 percent; it rose in 1928-29 to 5.25 percent and declined to 3.73 percent in 1929-30, while other German industrial profits were higher. This relatively low rate of profit has always characterized the German machinery industries. In 1930 these industries included about 3200 establishments employing 420,000 workers. Establishments employing about 80 percent of the total labor force were organized in a central association, the Verein Deutscher Maschinenbau-Anstalten, and in seventy-seven affiliated trade associations.

Practically all countries had a higher installa-

tion of new machinery in 1925 than in 1913. Germany had a lower installation, which is explained by extremely low domestic sales in 1925 because of the stabilization crisis and the shortage of capital following the inflation period. The comparatively large portion of the German population still engaged in agriculture, using much less machinery than is customary in the United States, is also a factor which must be considered in comparisons with Great Britain, where agriculture is relatively insignificant, and with the United States, where farms are highly industrialized. Moreover wages, which are about three times higher in the United States and about 30 percent higher in Great Britain than in Germany, also affect the differences in the consumption of machinery; the higher the wages, the greater is the extent of machinery utilization, as shown by Canada and the United States. Australia's utilization of machinery also greatly increased as a result of the rapid industrial growth of the country and its low density of population. Argentina and Cuba exhibited the same tendency. At the other extreme China and British India had the lowest utilization of machinery. Japan, on the other hand, increased its consumption of machinery 60 percent from 1913 to 1925 (allowing for the rise in prices).

The production and sale of machinery are directly dependent upon cyclical fluctuations. As the machinery industries supply the technical equipment for all branches of economic activity, their own development and sales react immediately to the slightest change in the economic situation. There is no separate growth for the machinery industries nor do special laws govern their development. On the contrary, as the producers of means of production they are hit early and severely by every depression, while a boom usually affects them less intensely and later than other industries. They also have maximum fluctuations in employment. Hence consideration of the variations in the production and sale of machinery is an important factor in the study of the business cycle.

In recent years important changes have occurred in the export of industrial machinery (Table II). Germany lost its lead in the world market as a result of the war. In 1925 American exports amounted to 35 percent of world exports, compared with 27 percent in 1913; Great Britain's share had declined from 28 percent to 24 percent, while the share of Germany (which had temporarily lost all its markets) had declined from 29 percent to 20 percent. American exports

rose again until 1929 and then declined sharply because of the world depression. Germany's exports reached their lowest point in 1923, but then rose uninterruptedly until they surpassed Great Britain's exports, which moreover remained consistently below the 1913 level. The total volume of the post-war world trade in machinery reached the pre-war level only in 1926, but it then increased until exports in 1929 were 63 percent higher than in 1913 (in pre-war prices). The three major producing countries shared equally in the 1928-29 increase in machinery exports; but the United States, aided by its large capital resources and technological superiority, retained its supremacy in the world market. In 1929 the three major producers combined accounted for 80 percent of machinery exports compared with 84 percent in 1913; the share of the United States was 35 percent, of Germany 25 percent and of Great Britain 20 percent. Nearly all the other exporting countries also shared in the rise of exports; France, Switzerland, Sweden, Japan and Canada made particularly large gains.

The American exports of machinery have increased steadily since 1923 (Table IV). Exports

TABLE IV
VALUE OF AMERICAN EXPORTS OF MACHINERY, 1923-29
(IN \$1000)

YEAR	ALL TYPES OF MACHINERY	INDUSTRIAL MACHINERY
1923	282,296	141,651
1924	310,576	145,088
1925*	367,206	172,312
1926	399,541	178,602
1927	435,574	196,427
1928	496,571	218,335
1929*	611,498	267,819

* Exports for 1925 and 1929 do not correspond with the figures in Table II because of differences in classifications.

Source: United States, Bureau of Foreign and Domestic Commerce, *Commerce Yearbook*, 1932, vol. I (1932) p. 343, 349.

of industrial machinery increased considerably less than the exports of other types of machinery. The greatest relative increase was in exports of agricultural machinery, which rose from \$50,373,000 in 1923 to \$140,801,000 in 1929. The main items of industrial machinery exports included steam and internal combustion engines, \$16,649,000; construction and conveying machines, \$25,492,000; mining, quarrying, oil well and refining machinery, \$39,601,000; metal working machinery, \$42,006,000; and textile machinery, \$8,611,000. The geographical distribution of industrial machinery exports was as follows: Europe, \$81,390,000; Latin America, \$71,672,000; Canada, \$68,713,000; Asia, \$31,-

742,000; Oceania, \$7,893,000; and Africa, \$6,409,000. Machinery exports, chiefly to the markets of the Americas and Asia, occupy an important place in the foreign trade of the United States.

A significant aspect of the foreign trade in machinery is that countries producing machinery, not the less industrialized countries, are still the largest importers as well as exporters of machinery (Table V). In 1913 the older industrialized countries which themselves produce machinery absorbed 65 percent of world machinery exports; although this proportion declined to 55 percent in the post-war period the decrease was largely due to a temporary reduction in the purchasing power of several of the producing countries. While Great Britain's imports rose considerably in comparison with 1913 and the American imports (which were very small in 1913) also increased, Germany's imports remained practically constant. Among the other producing countries Canada and Japan experienced an extraordinary rise in imports. The imports of Italy and Norway remained constant, while Russian imports in 1928 and 1929 were below the level of 1913, although 1930 showed an increase of 65 percent. The trend toward industrialization of economically backward countries is clearly revealed in China's increased machinery imports and in the imports of Australia, New Zealand, South Africa and even Egypt and Argentina. This also appears from the fact that approximately 75 percent of the British exports of machinery are absorbed by the less industrialized countries. Germany dominates the machinery imports of nearly every European country, usually supplying 50 percent and more of the market. Great Britain does not dominate all its dominions and colonies; the United States leads in Australia and Canada as well as in all the importing countries of the Americas.

The industrialization of countries hitherto economically backward constitutes an urgent problem of world economy in general and of the older industrial countries and their machinery industries in particular. This tendency is strikingly revealed in the mighty efforts of Soviet Russia to industrialize its economy and build up independent machinery industries, even though it will continue to import machinery for some time to come. The trade in machinery within the group of countries producing large quantities of machinery will always be in the interest of general progress, technological development and useful competition. But the machinery exports

TABLE V

IMPORTS OF MACHINERY, 1913-30

COUNTRY	VALUE OF IMPORTS (IN \$1,000,000)				PERCENTAGE SHARE IN 1929 OF		
	1913*	1928	1929	1930	GER- MANY	UNITED STATES	UNITED KING- DOM
Europe							
Austria	26.7	12.7	14.2	11.5	66.2	9.7	4.4†
Belgium and Luxemburg	20.9	28.3	40.5	41.7	46.8	6.3	14.2†
Czechoslovakia	—	24.1	27.4	20.4	63.1	11.3	7.3
Denmark	5.1	8.5	10.5	12.2	47.6	16.9	12.8
Finland	4.4	8.4	7.6	5.3	42.8	10.6	14.6
France	53.1	54.6	88.4	104.3	53.4	14.0	12.7†
Germany	24.0	46.8	41.1	32.1	—	24.4	16.9†
Greece	0.3	7.3	7.2	5.5	38.6	12.2	20.8
Hungary	—	9.3	7.1	5.5	54.0	8.2	3.7†
Italy	24.1	34.2	41.9	33.0	46.5	11.9	14.6†
Jugoslavia	—	9.3	10.6	8.9	43.5	5.4	5.4†
Netherlands	19.8	45.2	53.7	49.7	58.4	7.0	14.9†
Norway	7.4	8.6	10.3	9.6	44.5	12.7	14.4
Poland and Danzig	—	30.4	26.0	15.1	51.2	6.2	12.0
Rumania	8.2	16.6	17.8	14.3	—	—	—
Russia	81.2	73.5	76.8	177.0	31.0	50.3	5.7†
Spain	16.8	34.3	37.1	33.0	34.0	11.8	15.2†
Sweden	5.8	14.2	15.9	14.1	51.8	28.2	10.7
Switzerland	8.1	16.7	19.4	18.2	67.8	12.6	5.2†
United Kingdom	22.8	66.3	77.2	70.4	26.0	52.3	—
Asia							
India	33.3	69.1	67.0	51.6	12.6	8.8	71.5
Japan	14.6	38.2	51.5	38.5	19.2	29.9	28.0†
Dutch East Indies	14.0	28.5	32.2	22.6	19.4	26.2	15.5
China	4.9	15.2	23.7	19.0	14.3	19.9	28.4
Oceania							
Australia	20.9	42.6	30.8	39.0	6.3	46.9	37.4
New Zealand	4.3	10.4	11.6	9.9	2.9	38.0	42.6
Africa							
Union of South Africa	15.2	30.6	33.8	24.7	11.4	26.5	52.2
Egypt	4.3	9.6	9.8	9.0	14.7	11.0	42.3
North and South America							
United States	6.7	22.5	32.9	24.2	42.9	—	15.7
Canada	37.2	118.7	112.4	71.9	0.9	92.6	5.2
Mexico	11.8	23.6	25.0	21.4	10.1	75.8	5.9
Argentina	21.5	52.4	67.6	47.6	14.6	54.9	12.4
Brazil	24.2	35.5	39.3	24.5	—	—	—
Chile	8.3	10.7	14.1	10.7	24.0	55.7	13.2
Peru	3.1	6.3	7.8	6.4	13.7	59.0	13.0

* For countries in their 1913 boundaries. Figures for Austria include Hungary.
† As of 1930.

Source: Figures for 1913 and 1928 from Verein Deutscher Maschinenbau-Anstalten, *Statistisches Handbuch für die deutsche Maschinenindustrie, 1930* (Berlin 1930) p. 64; figures for 1929 and 1930 and those indicating percentage share of trade in 1929 from statistics collected by the Verein Deutscher Maschinenbau-Anstalten.

to countries which are mainly producers of raw materials and only slightly industrialized, such as British India, Australia, China, South America and even Japan, apparently involve two threats to the exporting countries. The imported machinery is used to produce goods which compete with similar goods formerly imported from the machinery exporting countries. At the same time there occurs a growth of machinery industries in the newly industrialized countries, competing

with the machinery exports of the older industrial countries. It takes considerable time, however, for an economically backward country to reach the stage of production in any particular field already reached by the older industrial countries, and more time must elapse before the necessary markets are conquered. In view of the modern tempo of technological progress the older industrial countries will continue to enjoy, at least for some time to come, an undefeat-

able economic and technical advantage. Moreover economically undeveloped regions, such as China, are so large that industrialization instead of exhausting the demand for goods creates new and larger demands. This is especially true of machinery industries in the newer industrial countries, as the establishment of such industries is dependent upon coal and iron, skilled personnel, technical research, adequate home markets and a generally higher economic and technical development in other branches of industry. Technological and economic progress will continue to originate in the older producing countries, which will thus tend to maintain the supremacy of their machinery industries.

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See: INDUSTRIALISM; INDUSTRIAL REVOLUTION; MACHINES AND TOOLS; TECHNOLOGY; INVENTION; AGRICULTURAL MACHINERY; ELECTRICAL MANUFACTURING INDUSTRY; IRON AND STEEL INDUSTRY.

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MACHINES AND TOOLS

ANCIENT, MEDIAEVAL AND EARLY MODERN. The differences between the tool and the machine have never been clearly defined. A tool is an object with which man works directly upon material and transforms it. A simple machine is a tool with which man can save time and energy in his work without employing external energy; in this class are the lever, wedge, wheel and axle, pulley, screw and inclined plane. An assembled machine is theoretically, according to Reuleaux, a "combination of resistant bodies so arranged that by their means the mechanical forces of nature can be compelled to do work accompanied by certain determinate motions." The use of human motive power in its operation is characteristic of a tool, but that alone does not necessarily distinguish it from a machine, some types of which may also be operated by human motive power. A tool is distinguished from a machine by its comparative simplicity and its capacity of being handled directly by the worker, who is consequently limited to the use of only one or two tools at any particular time. A machine may be a combination of tools operating simultaneously within the frame of a mechanical contrivance; the tools are not handled directly by the worker but by the contrivance itself, which comprises the tool or working machine, the transmitting apparatus and the motor mechanism. But tools are a component part only of machines which work upon material and transform it; many of the older machines, such as the crane, and of the newer, such as locomotives and dynamos, are not mere combinations of tools, while many modern tools are more complicated than the earlier machines.

By utilizing natural objects man used tools before he made them. He gradually learned to fashion tools out of stones and flints whose chance shape favored his purposes. In almost all the known cultures of the stone age are found hammers, chisels, planers, awls, knives, scrapers, borers, axes and the like. These tools were at first extremely crude, usually worked only on one side; but they were gradually improved, polished and perforated for handles made of wood, bone and horn. The men of the stone age constructed the first combination tool, a stone with a sharp point for boring and two edges for cutting and scraping. They also constructed crude machines for boring and sawing stone; these contrivances invented more than five thousand years ago facilitated more precise work and saved time and energy. A gimlet rotated with

the aid of a hunting bow must grind to powder the entire content of the hole, which moreover does not become wholly cylindrical. The boring contrivances of the stone age utilized a hollow stick of elder or similar wood, with the addition of sand, to grind into the stone being bored; a cylinder of stone was left within the stick, and in this way the work of grinding to powder the mass of inner stone was avoided. Many half finished borings of this sort have been found in the stone working places as well as many bored out centers, all of which demonstrate this method of working. It would be a mistake to assume, however, that in the stone age there were employed only those tools and implements which have been discovered by the archaeologists. In all probability many more were in use, at least the lever, the angle and the plumb.

During the bronze, or casting, age great improvements occurred in the making of tools. Tools of copper, a metal which could easily be hammered into shape, in many cases preceded those of bronze. In the stone age the working parts of tools were set in wood—stone knives, for example, were set in wooden sickles; in the bronze age the tools were as much as possible cast out of one piece of bronze and only the handles consisted of wood. In certain castings which have been found the tool and the handle are of one piece. This period developed two important new tools, the file and the blowpipe for blowing a small flame, especially for use in soldering. The utilization of many different kinds of tools is revealed by the varied metal work of the bronze age, particularly its earlier stages, in which hammered sheet metal was produced without the use of heat. To beat out metal slightly convex hammers are needed as well as punches, molds and stampers; all the latter tools were of course beaten out with the hammer. Tongs were without joints and were similar to present day nippers. Some form of tools for riveting probably already existed. Many loose rivets have been found in excavations; not only sheet metal but also leather girdles were riveted together. The compass and ruler were also in use during the bronze age. The handles of tools in this era are remarkable for the accuracy of their fit in the hand, which it was desired to spare as much as possible. Nor were quite modern labor saving methods unknown; the great wagon wheels of about 500 B.C., unearthed in 1883 at Dejbjerg in Jutland and now in the Copenhagen Museum, are not made of separate short pieces put together to form a circle but are

turned in a circle out of single blocks of wood.

Another contribution of the bronze age was the most important of all machines, the turning lathe. In its simplest form this consisted of two blocks between which the material being worked turned on two pegs of bronze. Around the material was twisted the string of a hunting bow, which was moved to and fro with one hand; with the other hand a bronze chisel was held against the revolving material. This form of the lathe has been preserved throughout the ages, and today it is found in as simple a form as the turning wheel of the watchmaker. By a slight alteration in the primitive lathe it is possible to drill, engrave, grind, polish, mill or stamp metal.

The error has been repeatedly made in investigations of the tools and machines of the bronze age of explaining too many things simply on the basis of present day skills. It is known, however, that there were in early times many methods, tools and machines which are no longer in use and of which consequently no knowledge at present exists. It is therefore necessary to reconstruct from the technique itself the tools and machines that were used. Lack of technical knowledge has been responsible for the neglect by research students of the technical and historical importance of the tools and machines used in this age, which reveal nearly all the basic principles underlying subsequent more highly developed forms.

In the casting, or bronze, age man learned to hammer bars of bronze into sheets without the use of heat. The forging age, usually called the iron age, is characterized by the production of ingots of pig iron in fire and their molding in fire by hammering. With the gradual improvement of the forge higher temperatures were developed and a fluid product obtained. The production of steel from iron was the most significant discovery of this age and was of the utmost importance in the development of tools and machines.

It may be assumed that as early as the stone age wooden rollers were placed underneath heavy burdens (tree trunks or stones) to facilitate cartage. From this the wagon wheel may have been derived. But it is unlikely that other wheels employed in the making of machines, for example, the water wheel or the windmill wheel, originated in the wagon wheel. In the Greek islands there still exist windmill wheels of the earliest type: the ends of several radiating fixed spokes are bound together with a rope to form a polygon, and between the spokes are fastened

triangular ship's sails. The water wheel probably developed out of the water lever with which grain was pounded. By placing a large spoon at one end of the lever and allowing water to run into it the ladle was made to lift up the pounder placed at the other end of the lever. When the spoon had sunk far enough it poured out the water and let the pounder fall. The water wheel resulted when many such spoons were placed around a revolving axis. It is striking that the oriental, Arabian and mediaeval water wheels clearly reveal the form of the ladle, or scoop. The form of the flat paddle in water wheels apparently first definitely appeared in Rome at the beginning of the Christian era. China developed the so-called turbine form of the water and windmill wheels, in which the shaft is vertical. Although folklore furnishes indirect testimony that ancient China had many machines, Chinese machine making must not be overrated; it is well established that only those Chinese books which were written under the influence of the Jesuits of the missions after 1726 contain impressive sketches of machines, many of which are pictures of European machines taken over by the Chinese.

The extensive Babylonian irrigation systems with their elaborate pumping apparatus indicate a relatively high development of machines and tools in old Asia Minor. This was also true of ancient Egypt. Many peculiar tools are pictured on the walls of old Egyptian tombs. The Egyptians did not use the spade but with a flat hoe beat the ground loose and threw the earth directly to one side. The carpenters used sawing tools which pressed apart slits made in the wood. This was necessary since the saw with crosscut teeth was unknown. Egypt probably developed the cogwheel and improved the potter's wheel, the disk of which in its primitive form was set going by the hand, so that the wheel was now rotated with the foot. The Egyptian ropemaker used a whirling flywheel by which the rope rotated continuously, but the ropemaker's spinning wheel was unknown. The Egyptian flywheel is found also in the Orient, where it is used to keep in continuous rotation the little prayer drums in the hands of the faithful. Two measuring machines, the balance scales and the water clock, were developed by the Egyptians. The tomb of Petosiris (300 B.C.) contains an excellent picture of an Egyptian turning lathe, and earlier reliefs depict oil and wine presses. The screw pump, with which Archimedes is reported to have become acquainted in Egypt,

was probably introduced into that country by the Persian conquerors. The proper interpretation of a passage in Herodotus indicates that the Egyptian pyramid builders erected on the steps machines which raised the blocks of stone with the help of a great lever. This hoisting apparatus was adapted for other uses in the Egyptian and Asiatic hydraulic machines, which are still used in Egypt. The heavy stones of the pyramid of Khafre (c. 2850 B.C.) reveal notches into which the claws of the hoisting machine locked. Obelisks placed on sturdy boards were transported on rollers and were raised by being rolled upon an inclined plane, the end sliding into a huge pile of sand, which was then dug away; thus the obelisk already in an almost vertical position could be laid in its foundation.

The technology of the Greeks was based upon the earlier contributions of Asiatic and Mediterranean peoples. A critical examination has shown that practically all the technical inventions attributed to the Greeks were known long before. For example, the great battering ram for the demolition of fortress walls was not invented by the Greeks but was taken over from the Babylonians; on the alabaster reliefs of Nimrod (c. 680 B.C.), which are now in London, heavy transportable rams are delineated. The Pennsylvania University Museum has an important Babylonian seal impress bearing one of the oldest known representations of the plow; one of the men is in the act of seeding the tube, or grain, drill, through which the seed was dropped into the furrow. In these densely populated regions as well as in China such apparently modern agricultural machines were necessary. Syrian technicians were probably the inventors of the improved machines with which the Greeks and Romans shot cannon balls and arrows; reconstructions of these machines show an initial force of 24,000 kilograms, while according to Josephus a cannon ball of fifty-three pounds was shot a distance of 360 meters. Greek machines were skilfully constructed; one indication of this is the assertion of Plato that the world's axis rests on steel points, a comparison which must have been based upon experience with this mode of support. Plato stressed also the importance of experiment; he says repeatedly and emphatically that knowledge based on "counting, measuring and weighing" is a means of correcting the deception of the senses, a means of making apparent wonders clear and intelligible. Misunderstanding of Aristotle, who in his book on mechanics treats the subject dialecti-

cally but not exhaustively, was responsible for lags in many branches of technology; thus there was set up the doctrine that "nature abhors a vacuum," which became fatal to pneumatics, hydraulics and pump and engine construction.

An extensive array of tools and machines was described by Philo of Byzantium, a writer who lived in the second or third century B.C. Until recently it has been possible in only a few cases to prove that the machines described by Philo were in practical use at the time. It is certain that there was employed a form of treadmill run by human power for the purpose of drawing water from a well by means of a chain of buckets. Such a chain (chain pump) was also operated by ladle wheels built into a brook or river. Another type of wheel, the Persian wheel, had dip-pers alongside the ladles to raise the water level of brooks, the water being directed through ditches over the fields for irrigation. Philo also describes the steam bellows for blowing a fire, a contrivance for moving flap valves, and pumps with cylinders and pistons. According to him the cylinders were cast out of bronze and turned on a lathe.

Greek technicians, known as *technitai* or *mechanopoiói*, were the teachers of the Roman machine makers, who were classed among the building technicians or architects. Many machine parts have been recently unearthed, among others a well preserved middle section of a great Roman cannon in Spain, a water wheel in Pompeii and great screw presses in Herculaneum. Pompeian vases, reliefs and mural paintings as well as the many tools unearthed reveal an extensive Roman development and use of tools and machines, the economic and social significance of which during this era has not yet been adequately appreciated. This is largely because Roman as well as Greek writers give meager accounts of technology; only the more recent excavations and comparisons with other periods have revealed the high technical achievements of the Romans not only in building but in the development and construction of machines and tools. High technical excellence was required in the perfect execution of Roman bathtubs made of bronze plate, the drawn iron wire mentioned by the poet Claudianus (c. 400), which was probably a Roman invention, the work in colored glass and the making of intricate door locks. The blowpipe was used to manipulate glass paste. In one of the two imperial ships recently dug up in Lake Nemi there were found the remains of a ball bearing on which there apparently revolved

a pavilion for the purpose of excluding the sun. The emperor Commodus had carriages whose wheels measured the distance covered by means of a clocking mechanism. Roman arenas contained elevators for the combatants and animals and heating systems were constructed under the floors of apartments. These mechanical contrivances and the great Roman buildings necessarily required many highly developed tools and machines.

The Pompeian water wheel as well as the many mills and machines for kneading dough revealed by the excavations indicate that water power and the power of animal driven capstans were commonly employed. These sources of power were not, however, utilized in the most rational manner. Horses, for example, were harnessed to the capstan in such a fashion that much of their power was wasted. In the mills there were signaling contrivances to indicate when a horse was going too slowly or was standing still. The horses wore eye flaps to keep them from becoming dizzy and it is possible that there existed a mechanically driven whip, which would seem to be depicted in reliefs and on sixth century war chariots. Roman grain mills in the period of the empire consisted of a cone shaped lower stone and an upper stone hollowed out in cone fashion and suspended on an iron plumb. Flat stones were used only in small mills turned by hand. Grinding mills for crushing oil seeds were described by Cato about the time of 184 B.C. The influence of the machine on occupations appeared in the separation of the miller and the baker. Originally the baker was his own miller, and the mills in Pompeii are consequently in the same room as the ovens. But when toward the end of the fifth century A.D. the water wheel displaced the horse capstan in the mill, the millers left the city to settle near water.

Pompeii was noted for the construction of large machines. The recently discovered water wheel, which was buried under lava in 79 A.D., is only 93 centimeters in diameter and only 17 centimeters thick; and Vitruvius (c. 14 B.C.) describes only small water wheels which turned very fast. But it must not be concluded that the Romans did not build large machines, especially water wheels. The Greek treading drum, in which persons worked in an erect posture, must have had a diameter of approximately 4 meters; Greek and Roman machine makers were therefore capable of building water wheels of corresponding diameter. Roman reliefs depict cranes, apparently 12 meters in height, in connection

with great treadmills run by at least five workers.

As has been shown by Henry C. Mercer in his books and in his museum, modern craftsmen are still dependent upon Roman tool forms, which were well adapted to their respective purposes. Many seemingly unsuitable Roman forms which cannot yet be explained may have involved certain methods of working unfamiliar to modern craftsmen. Roman shears were without joints and consisted of two knives connected by an elastic handle or flat spring, a form retained by women and tailors well into the Middle Ages. The Roman forms of sheep shears and turf shears are still in use. The failure of the Romans to use jointed scissors is puzzling, since pictures reveal that they were familiar with the linked tongs as early as the fifth century B.C. The Roman saw was constructed of a wooden frame held together on one side by a coiled rope which tightly held the blade of the saw, the blade being stationary.

Despite their meagerness Roman technical writings convey considerable information. Vitruvius describes the technical aspects of building, water works and wells, clocks and hoisting mechanisms, water mills and pumps, lathes, bellows and capstans, machine bearings and road rollers. The imposing Roman aqueducts described by Frontinus (*c.* 97), many miles of which were set on stone arches, distributed water through underground pipes soldered together out of single lead sheets. The consumption of water was measured by means of a small standard gauge at the home of the user. Since writings of Hero of Alexandria (*c.* 110) treat more of the science of physics and its apparatus than of machine construction, his automatic door opener and other such contrivances must be considered only as physicists' toys and not as instruments of daily use. This was also true of his anticipation of the steam engine (a wheel moved by steam); people marveled at the contrivance, but it was not utilized as a practical source of power. Both Hero and Vitruvius describe cranes having one, two, three and four masts respectively, which combine the lever, the pulley and the windlass. The handwritten illustrated textbooks on technology, apparently introduced by Apollodorus of Damascus (*c.* 126) and characterized by a passion for the remarkable and unrealizable, have been incorrectly considered technical textbooks. Since the long periods of apprenticeship resulted in entire familiarity with tool and material, it was not necessary that the textbooks should provide any instruction in these matters; in the illustrated

manuals were incorporated, however, the more advanced technical ideas and the knowledge acquired from military campaigns and travels.

There were scarcely any changes (except retrogressive) in tools and machines during the early Middle Ages. Contrary to tradition, for example, bells were not invented by a Christian bishop but arose in definite technical dependence upon oriental bell founding. In Babylon, Greece and Rome only small bells were used at worship, on house doors, on collars of animals and in the market places. Larger bells were necessary to summon the Christian community. But there was no need of a new invention, since the ancients had mechanisms with which they cast huge parts of monuments, temple doors, pillars and the like, as may be seen from those pieces taken from pagan temples and palaces and still found in the churches in Rome. The idea of an inventive ecclesiastical technique was strengthened by the technical textbook of Theophilus (*c.* 1100); but his writings on tools, machines, enameling, glass blowing, glass mosaic work, bell founding, soldering, the preparation of brass, the beating of gold, inlaid enamel work, organ building, the making of paper, forging in a pit and damasking are merely the summary of knowledge inherited from the ancients.

Confusion in terminology creates many difficulties in the study of technology. Wire was originally drawn by a smith from a piece of beaten metal, or "forged"; later metal workers learned to draw wire in a drawing iron, and while the process was different the artisan was still known as a smith. Even fourteenth century writings speak of wire smiths, although no master workman manufactured wire except with a drawing iron. The artisan who worked without a power machine faced a difficult task, as the strongest tools he possessed were the muscles of his body. Toward the end of the fourteenth century an unknown master workman, probably a wire drawer of Nuremberg, conceived the idea of seating himself on a seesaw so that with a strong pull of his muscles and proper use of the whole weight of his body he could jerk himself backward; as he did so he grasped the glowing wire and drew it through the drawing iron. Sketches of these ingenious seesaws of the "jerker" appear in the house records of a Nuremberg handicraft establishment. Work on the seesaw was difficult and tedious. Then a jerker conceived the idea of connecting the seesaw to the winch of a water wheel by means of a strap, which is pictured in the first

printed textbook on civil engineering, published by Biringuccio in 1540 in Venice. The man still rocked himself back and forth, however—an excellent example of how slowly technological progress moves. Disregard of this slow progress is responsible for an entirely false conception of the development of technology; many writers envisage a non-technical antiquity and a Gothic era singularly rich in inventors favored by God and cling to the long refuted notion of an "age of inventions" around the year 1300. This is not correct. Of the three greatest inventions, gunpowder, the compass and the printing press, the first two were Chinese inventions, the compass being introduced into Europe as early as 1000 and gunpowder in the thirteenth century, while the printing press was not invented until two centuries later.

Nor must too much importance be ascribed to the few inventions whose developments are well known. The origins of the majority of technically important inventions are still a mystery. Especially significant is the fact that practically nothing is known of the inventors of tools and machines. There is no inkling of who was the first to introduce a treadle into the loom or the heavy ironworking hammer lifted by the water wheel. The treadle loom appears first in a wall painting around 1310, and there is a German account of 1320 of a great piece of iron construction with the aid of water power. This, however, is wholly fortuitous; it is possible that these mechanical contrivances are hundreds of years older. Inventions of tremendous significance appear suddenly, but their origins are unknown. There is, for example, the mechanical escapement wheel of watches, the origin of which cannot be determined even within several centuries. When a technician devised some mechanical device he did not always try it out at once but often only sketched it. The need for such a contrivance might arise suddenly during times of war and disappear immediately after, with the result that the idea was forgotten: much has thus probably been lost; the old chronicles, for example, tell of wonderful machines once used during a military campaign and of how the Saracens quickly invented machines of their own to counteract the machines of the crusaders.

The introduction of new tools and machines moreover often met serious resistance. In Cologne in 1397 tailors were forbidden to use a machine for pressing the heads of pins. New machines were frequently ordered destroyed by the guild authorities and inventors sometimes

even punished by imprisonment. Only when a new tool or machine benefited a larger circle was it finally accepted. Thus in 1298 the cloth weavers of Speyer were permitted to use the spinning wheel.

Machines of a quite modern character appeared in the later Middle Ages. In 1272 Borghesano, who invented a process of silk reeling, brought from Lucca to Bologna a machine which automatically twisted silk thread as it came from the cocoon into strong spun silk; the machine is reported to have contained from 100 to 120 iron spindles which were all turned simultaneously by a water wheel. It was decreed that whoever showed this magnificent machine to a stranger should be hanged, and it was apparently not until 1555 that it became known in Switzerland and not until 1718 in England. The technology of the English cotton industry which later developed was a technical derivative of the machines in the Italian silk industry of the thirteenth century.

The many thousands of technical sketches by Leonardo da Vinci, which deal with the improvement of tools, lathes and screw cutters, military and power machines, spinning and cloth shearing machines and the like, were not wholly representations of his own inventions but developments of already existing devices which Leonardo wished to improve and to introduce on a large scale. About 1500 he made a sketch of a yarn distributor for bobbins in a spinning machine, a contrivance which was not invented in England until 1794. Leonardo also constructed a steam cylinder with pistons in order to study the action of steam and even tried to shoot a cannon ball from a steam cannon.

The technical literature of the times must not be considered as a collection of fantasies. In the first printed book on machines, published in 1472 by the Italian Valturio, and in the later books of Biringuccio and Agricola the descriptions of machines are based on experience and portray machines and mechanical procedures actually in use. While this cannot be said of subsequent technical literature, even in the latter the descriptions cannot be dismissed as merely fantastic. Historical research makes it increasingly apparent that the machines described were either actually constructed or could have been made without difficulty. Very few of these machines, however, remained in practical use. Later there arose another literature, which aimed to familiarize laymen with the working of new tools and machines and which indicates the

relatively extensive use of mechanical devices in the late Middle Ages.

The illustrated manuscripts and books of the time, which increased greatly in number with the growth of mechanical methods of production, throw considerable light on the tools and machines that were in use. One book describes little rolling machines with which to roll lead strips for window glass trimming. Domenico Fontana in 1590 minutely describes and sketches the tools and mechanical apparatus which he used to transport three enormous obelisks from Egypt to Rome and to set them up in the latter city. Another book describes a ribbon weaving machine, said to have been invented by a citizen of Danzig in 1590, on which several narrow ribbons could be woven simultaneously; previously a ribbon had to be woven by itself on a frame. There are descriptions of tools, usually considered wholly modern, with many parts which could be substituted quickly for each other, resembling the combination of a three-cornered awl and a borer. Many other complex constructions are pictured and explained. Investigations have been confined to the development of a few tools only, but this is wholly insufficient, since the principles of construction involved in any particular tool or machine could have been transferred to another tool or machine in a fashion which cannot be demonstrated today.

In a German manuscript dated 1505, now in the Preussische Staatsbibliothek (MS. Germ. Quart. 132), which contains excellent illustrations of the borer, brace, rounded knives for cutting circular plates, compasses, calipers, tools for tightening crossbows, branding irons, pliers and tools with hollow handles for the insertion of other tools, there appear for the first time two important clamping devices, the vise and the joiner's bench with two clamps movable by means of screws. The screw was established among tools as a saver of time and energy by several unknown inventors toward the close of the fifteenth century. A study of the vise used by metal workers is especially interesting. The Orient and the ancient world had no clamping devices among their tools. The material being worked was held fast by the hands or propped against one or more wedges or pins. Woodworkers did the same on the planing bench. In the house records of the Nuremberg handicraft establishment there are many examples of clamping devices used by metal workers and joiners, but none is equipped with screws. Joiners were apparently also unfamiliar with the screw clamp;

they were so skilled that each could work upon loose material. With the introduction of the screw this skill gradually disappeared. In the manuscript of 1505 the vise, although still constructed entirely of wood, is set with iron clamps. A kind of hand vise entirely of iron appeared in 1438 in one of the illustrated manuscripts on military technique. In 1528 locksmiths are pictured working on a small iron vise. The screw spindle, which lies parallel to the nearer edge of the workbench, has on the right side a four-edged nut which can be tightened or loosened by means of a free key. Progress, however, was slow; it was not until the close of the eighteenth century that circular saws were developed in France and England.

Great improvements were made in the lathe. In 1413 in Brunswick an enormous cannon was bored weighing 8.7 tons, the work on which required a heavy wooden lathe; in the eighteenth century such simple lathes were used for turning very heavy stone pillars. These improvements in the lathe came very slowly; for centuries the material being worked was turned by means of a bowstring, and half the revolutions were wasted as the material revolved. In Nuremberg by 1411 there existed lathes on which material turned in only one direction, and later lathes were operated by a crank and flywheel. One such lathe was designed by Leonardo da Vinci and similar lathes were used by stone engravers. An earlier improvement was the lathe with a support moved by turning a screw. In 1590 a lathe was made equipped with a guiding spindle, but the invention was suppressed and did not reappear until the eighteenth century. By 1700 the belt driven lathe was coming into extensive use. The lathe and its tools were now being exquisitely finished technically; it is possible that not only round but also oval and odd shapes were turned. Although the revolving disk was in use by this time, it was kept secret and was not generally used until the nineteenth century.

The lathe led to the development of the cutter, a tool of the utmost importance in modern industry. Originally the cutter was a tool equipped with a handle and sharp teeth, which was used to cut through strong iron barriers during siege warfare. In building the large instruments for the astronomical observatory in Peking in 1668 the Jesuits in order to level out the great astronomical circle used steel cutters driven by power from a donkey driven capstan. In south Germany toward the close of the seventeenth century the needle makers apparently used small,

round cutters, which were made rough all around in the manner of files, on the tips of which the needles were placed. By 1713 these cutters were so developed that their teeth were used to cut the wheels of a clock.

In mining and smelting there was a considerable technical development, particularly in the construction of pumping, transport and ventilating equipment. By the beginning of the eighteenth century there existed a considerable variety of tools and toolmaking machines made of iron. Machines were becoming larger and their construction imposed heavy demands on tools and machine tools.

F. M. FELDHAUS

MODERN. The technology of machines and tools already in existence served as the starting point for the development of new machinery which culminated in the industrial revolution. An increasing construction of larger and more complex machines during the sixteenth and seventeenth centuries not only improved mechanical engineering but led also to the technological application of scientific discoveries. At the same time the commercial revolution and the early factory system provided an economic basis for the introduction of machinery. Under the early factory system tools were improved and simplified and many new forms of tools were created to meet the requirements of increasing specialization and division of labor; this simplification and multiplication in turn suggested their mechanical combination into machines. Moreover the increasing fund of technical knowledge was enriched by the skill and experience of the machinists who, while engaged in construction or repair, improved upon or invented machines. Particularly in the manufacture of metal products did machinery come into greater use in the early factory; one such establishment had an imposing array of water driven slitting, pressing, shearing and rolling machines.

The progressive realization of the technical function of machinery completely revolutionizes the relations between labor and production (and social relations in general), a socio-economic development which increasingly conditions the nature of machinery. The creation and improvement of tools emphasized the primacy of labor in production by multiplying its skill; technology was essentially an accumulation of manual skills in the operation of tools. Machinery transfers skill to the machine, subordinating the worker to the mechanical equipment of produc-

tion; technology becomes essentially an accumulation of engineering skill and of machines and processes which tend to reduce the relative importance of manual skill.

The machine of the industrial revolution was basically a contrivance which mechanized existing tools and reproduced manual actions. Crocheting and knitting were mechanically combined in the stocking knitting machine of the seventeenth century. Prior to the invention of spinning machinery the spinner held a single thread between the thumb and forefinger, a process which was replaced by the movable carriage in Hargreaves' spinning jenny, which mechanized spinning. The rollers in Arkwright's spinning frame likewise were substitutes for the human fingers, twisting the yarn as it was wound on the spindles. The tool formerly held and operated by the worker was incorporated in the machine, which combined and mechanically operated a number of similar tools; the spinning jenny, for example, operated eight spindles simultaneously. Other machines might incorporate only a single tool, but the mechanization increased the speed, accuracy or capacity to produce. While the machines of the industrial revolution were essentially mechanized tools or their combination, this is true only in part and frequently not at all of a whole series of machines created by later technological development, which has also increased enormously the importance of apparatus, a means of production totally dissimilar to machines and tools.

Textile machinery was improved considerably during the sixteenth and seventeenth centuries and offered the most favorable technical and economic basis for the development of new machines. By 1745 the ribbon loom was practically automatic, the worker simply supplying power and stopping the machine to tie broken threads. One deficiency of the ribbon loom, the difficulty of controlling the shuttle operating through a wide web, was overcome by the flying shuttle. This invention, which was first used in the woolen loom, where it permitted weaving of wider cloth and cut in half the worker's labor, was by 1760 introduced in the manufacture of cotton cloth; the resulting increased demand for yarn and the rise in prices created greater interest in mechanical spinning. Many spinning machines had been built, but they were imperfect; the problem was finally solved by the spinning jenny and the spinning frame. The deficiency of the jenny in being able to spin only weft thread was rectified by the frame, which

spun both west and warp, while Crompton's spinning mule combined and improved upon both, producing a finer, smoother and more elastic yarn.

Complete realization of the mechanical revolution required a new source of mechanical power. There had been no progress in this direction since the Italian turret windmill of the fifteenth century. Water power was used more and more, but it involved limitations in the location of industry and the relatively inefficient water wheels were incapable of moving very heavy machinery. The expansion of mining had led to important improvements in pumping machines and to an increase in mechanical and scientific knowledge which contributed to the invention of the steam engine. Early in the eighteenth century Newcomen devised a steam pumping engine. But this steam engine was limited to pumping in mines, until Watt transformed it by means of the separate condensing chamber and other improvements, which from reciprocating motion produced the rotary motion necessary to drive machines. The reciprocating steam engine promptly displaced human and water power in the driving of textile machinery. A single prime mover was now able to supply power to several working machines; and the factory became a weird maze of belts, ropes and pulleys whirling overhead and alongside the machines. Larger and more complex machines could now be constructed, and these in turn required more powerful steam engines, which created new problems concerning economy in the transmission of power and the design of machinery.

These developments depended upon and stimulated progress in metallurgy. Few metal parts had been used in the early machines; water wheels, windmills and the machines of the industrial revolution were constructed mainly of wood. But the steam engine and the new and heavier working machines required large amounts of iron. Metallurgical advances followed, combining mechanical and chemical features. The steam engine contributed directly to the transformation of metallurgy, being used to furnish power to the forge hammer and the blast.

The development of new techniques in metal working permitted the construction of larger, more complex and better designed machines. Considerable progress had been made in metal working tools, machines and appliances; power driven shears, rollers and hammers were widely used by 1750. But existing metal working machines were neither powerful enough nor

under adequate control; they lacked precision in producing the parts needed for the new machines, especially the steam engine. The construction of machinery had to become a function of machinery, increasingly independent of the skill and muscle of the worker; and machine tools, which shape metal into wrought forms by bending, pressing, shearing, paring, boring, had to be more powerful, larger and of greater precision. Improvements in the boring machine were of crucial importance as they made possible the manufacture of more accurate and larger cylinders and the construction of more efficient and powerful steam engines. Introduction of the milling cutter with its larger number of teeth, which eased the strain on each tooth as it cut, was of great significance because grinding machines had not yet been developed. Around 1800 came the power driven lathe; and the accuracy of its work was in turn enhanced by the slide rest, which was soon adapted to other machine tools. Where formerly the worker himself had held and guided the lathe's cutting tool, it was now held by the rest moving parallel with the work's axis, the worker simply turning a screw handle; the result was greater regularity of pressure and uniformity of work. Improvements in the screw were of great importance in the development of machine tools and heavy working machinery. The lathe and other machine tools were used to cut screws of more uniform thread, thus making interchangeable all screws of the same size. Planing, shearing, pressing and drilling machines were made larger and more precise in their operation. The production of more accurate machine parts led to accelerated manufacture of interchangeable standardized parts. A variety of small precision instruments were put to use; at the same time some machine tools were made larger and more powerful, among them the steam hammer and the massive lathes for machining the driving wheels of locomotives and the flywheels of steam engines.

The liberation of machine tools from the limitations of manual labor resulted in the transformation or disappearance of the tool formerly operated by the skilled worker. The slide rest, for example, replaced the highly skilled operator by a worker who had simply to turn a screw handle, and the worker himself was displaced when the slide rest was made automatic. On the other hand, machinery enlarged the scope of labor, quantitatively in the performance of heavier work and in higher output and quali-

tatively in greater accuracy. Machinery did work which labor could not do and did better the work which labor could do. New skills arose, particularly in machine shops, but they yielded gradually to more completely automatic machines. The construction of machines became increasingly dependent upon the technological application of science, where formerly it had proceeded largely by rule of thumb; its problems stimulated important advances in kinetics and thermodynamics, while engineering made ever greater demands upon mathematics, physics and chemistry.

New and improved working machines were called into being by technological progress and by the adoption of mechanical production in one branch of manufacturing after another. Not only were the earlier textile machines improved but new machines were created for other phases of the work, for mechanization of one process makes necessary the mechanization of other processes. By 1800 the power cotton loom, which produced a larger and finer output, was being introduced extensively and there were machines for mechanical cotton printing and wool combing. The Jacquard loom unified and improved upon elements of other looms; its system of cords simultaneously and automatically selected and moved the needed warp threads. This characteristic development of automatic operation was followed by contrivances to stop the machines when a thread breaks or when the shuttle bobbin is emptied of weft. In the 1880's a new type of spindle doubled the yield of spinning machines. By this time there was a large variety of machines which performed mechanically all operations involved in the production of textiles. A collateral development was the application of machinery to the production of garments, initiated by the sewing machine and followed by machines which sewed buttons, made buttonholes and cut cloth. Starting with the invention of the skiving machine in 1845, which mechanized the skiving knife, the manufacture of boots and shoes was within fifty years completely mechanized by an intensive division of labor and specialization of machinery based on one hundred operations and scores of machines. The manufacture of pulp paper, while essentially a product of chemical research and its industrial application, depended also upon extensive improvements in machinery; by the 1870's paper making was almost entirely automatic, employing relatively few workers. In a modern paper plant the machine is fed the fluid

pulp at one end and at the other emerges the rolled paper—all operations are automatic within the limits of the machine. In the making of steel the regenerative open hearth furnace speeded up the mechanization of all processes by means of machines of immense size, complexity and capacity. The molding machine transformed foundry work, and there was a parallel development of machines for the fabrication of steel. Use of the regenerative furnace with the continuous melting tank was followed within twenty-five years by the complete mechanization of glassmaking and the perfection of the astonishingly complex Owens automatic bottle machine. While the linotype machine substituted one skill for another, the printing press developed to the point where multiform operations may be performed automatically by one giant machine: in newspaper plants the paper is fed at one end and emerges a complete, folded newspaper of scores of pages at the other. The canning of foods involved the use of complex and almost automatic cooking and cooling apparatus, measuring devices and can packing machines. The milling, measuring and packing of flour was mechanized until only a relatively trifling labor force was necessary. In one industry after another machines inexorably invaded the province of manual labor.

Machine tools were early adapted to the production of a variety of metal wares: already before 1800 the milling cutter was used in the quantity manufacture of keys, and metal working machinery was applied on a large scale to the production of firearms, sewing machines, metal gadgets of all sorts and scores of devices for homes and offices which mechanized not merely manual skills but intelligence itself, as in the case of calculating machines. They were adapted also to the production of agricultural machinery, which, starting with improvements in the older implements and tools and the invention of the mechanical reaper, was augmented by a large variety of machines and implements. Woodworking machines, ranging from the cutting of logs to fine cabinetwork, were based on adaptations of the lathe, drilling, milling, grinding and other machine tools, mainly of the cutting type but much keener than those used on metal.

The construction of more and more diversified machinery could not have been accomplished without the increasing automatization of machine tools and advances in the manufacture of interchangeable parts. While the parts of ma-

chines became more complex and varied they also acquired more regularity, and this created new standards of efficiency and accuracy for machine tools. These standards were made possible after the middle of the nineteenth century by innumerable improvements in machine tools and particularly by the development of the turret lathe, the automatic screw machine and the milling and grinding machines. The turret lathe enhanced accuracy and control. The automatic screw machine, several of which could be attended by one worker, meant production of cheaper and better screws. The old milling cutter required frequent repairs because its shallow teeth were quickly rendered useless; the cutter of the new milling machine had greater cutting depth and could be kept sharp for a longer time and reground in its hardened state. Constructed in a variety of types, the universal milling machine displaced considerable manual labor, performed high quality work and was peculiarly adapted to mass production, since the rigidity of the cutting tool and its multiple edges permitted accurate and cheap reproduction of duplicate shapes and forms. Hand filing had been previously required but was now done more accurately and with less labor by improved machine tools. There were great advances also in planing machines and riveters; in presses for both hot and cold metal; in shearing, drilling and other machine tools. New tools developed, among them the pneumatic drill operated by compressed air, which works at tremendously high speeds and can be used in any position within the limits of its hose. Higher speeds and deeper cuts, more than doubling the output of a machine, were made possible by the introduction of high speed steel after the 1880's, and twenty years later machine shop practise was revolutionized by the increasing use of harder and more stabilized alloy steel for cutting tools. The greater the rigidity of the tool the greater the accuracy and automatic character of operation, hence the development of jigs, fixtures and other appliances (the screw wrench, angle plate, block, wedge, strap, clamp and bolt).

Meanwhile apparatus as a means of production became increasingly important as the technological application of chemistry created new and modified old industries. Apparatus is most highly developed in the chemical industry with its array of containers, pipes and similar contrivances but it is also of great importance in other industries which require one or more chemical processes. It was first used on a large

scale in the production and distribution of gas, in the chemical industry itself, in the manufacture of rubber and in the production of petroleum and its derivatives. With the development of synthetic products (dyestuffs, pulp paper, cement, celluloid; nitrates, rayon, regenerated and artificial leather and rubber, distillates of coal), in which the fundamental technology involves complex chemical action and precise control, apparatus attained still greater significance. It is of great importance in the derivation of by-products and it is required also for chemical processes in the manufacture of glass and soap, in blast furnaces, in the production of alloys and other industrial operations, in electrolysis. Production by means of apparatus implies more extensive and intensive exploitation of raw materials—the creation of a series of new products beyond the capacity of machines. Not much labor is required in such production, which is highly automatic; the workers are wholly unskilled, acting under orders of a handful of chemical engineers.

As machines became more automatic, transfer of skill and division and specialization of labor became more marked. No more than average manual dexterity and intelligence are necessary to "operate" automatic machines. Although there are machines which perform all the operations required to turn out one complete product, highly developed mechanical production is based on the "serialization" of machines, as in the case of the many machines used in the making of boots and shoes. The work to be performed is considered as a mechanical problem, split up into its separate and constituent processes, with a machine devised to perform each process, the work "flowing" from operation to operation and from machine to machine. The decisive consideration is neither the worker nor the machine but the process itself and its mechanization and progressively automatic performance. This principle, inherent in machinery, is most fully realized in mass production, where intensive specialization and serialization of machines and labor are supplemented by a considerable amount of auxiliary equipment—belt conveyors, trucks, portable conveyors and loaders, chutes and pneumatic and gravity devices, cranes, electric hoists, automatic counting, packaging and handling contrivances. Characteristic of mass production is the fact that in an automobile plant a spring formerly made by one mechanic is now made by thirteen processes involving eleven workers and a series of machines.

As in the case of the steam engine the development of new sources of power profoundly influenced the structure and operation of machines. Improvements in the steam engine, in the generation and transmission of its power, particularly in the form of the turbine, contributed enormously to the steady growth in the size and efficiency of working machines. The limitations of steam power were broken by the electric motor and the internal combustion engine.

Agricultural machinery was particularly influenced by the internal combustion engine. Steam power had been used to pull plows on large farms, but the results were unsatisfactory; the new oil engine was early adapted to the use of agricultural machinery, although limited because of its weight. But with the improvement of the oil engine and the construction of light tractors the way was opened for the intensive use of the new power on farms and their accelerated mechanization, especially after the introduction of the general purpose tractor. The tractor modified the older agricultural implements and machinery and forced the development of a multitude of new implements. The tendency is for the tractor to be adapted to the performance of all sorts of farm operations. Other changes in agricultural machinery were improved construction, better lubrication, more durable metals for cutting edges and wearing surfaces, easy manipulation and power lifts.

Electric power not only accelerated the mechanization of industry but greatly augmented the automatic character of machinery. Electric drive transformed the early transmitting mechanism of belts, shafts and pulleys. The advantages of electric group drive were at once apparent, especially in the elimination of engine attendance and of much of the wear and tear on bearings and belts. Still more advantageous was the individual drive with a motor for each machine; this made possible the most logical arrangement of machinery, of prime importance in serialization and mass production. It was but a short step to the designing and construction of motors adapted to the needs of particular machines; finally the motor itself became an integral part of the machine. The influence of electricity on machinery goes beyond the superiority of electric drive; it results in the designing of machinery in which the functions of control of speed, accuracy and quality are increasingly performed by electrical devices. The operation of machines is simplified and made more auto-

matic, particularly in the recent manifestations of remote control and in the workings of the photoelectric cell.

Recent developments in machine tools are characterized by their increasing size, complexity and simplified automatic control. Despite the use of light metals (also used to reduce stresses in high speed reciprocating parts) machine tools are becoming heavier—one combination drilling and boring machine weighs 70,000 pounds, requiring but a single operator who controls the entire machine by one push button station. Electric motors are being built into machine tools. Other tools are operated by hydraulic drive, although they still make use of electricity for control and other purposes. Machine tools are adapted to a variety of purposes; horizontal boring machines have been constructed which can be used for milling, drilling and tapping, while other machines perform multiple operations in one continuous process. Operation of these machines becomes increasingly automatic; in one boring machine four moves of a lever control the whole operation, and reversal of the lever releases the work. In other machines control is even more simplified and automatic. The parts of complex lathes are equipped with individual motors, the push button being used to switch them on and off. Pressure and precision are intensified; a steam platen press applies pressure of 20,000,000 pounds with a maximum deflection of the platens of not more than four thousandths of an inch; one boring machine makes a hole cylindrical to within one hundredth of a millimeter; and standard dimensional gauges are accurate to three millionths of an inch.

In working machinery recent developments are marked by greater rigidity and speeds and larger outputs, resulting in heavier and more complex machines. New types of machine are continually being introduced, involving a high rate of obsolescence. In rayon plants there are spinning frames on which every spindle is driven by its own motor, far outstripping the older mechanical spindles; indeed electrification has rendered rayon production practically automatic, including the chemical stages. Pulp paper production is under remote control, concentrated in a series of gauges and push buttons; temperatures and pressures are electrically regulated. All machines are practically automatic in the silk industry, with the exception of reeling, in which the operator still performs a large part of the work. In the chemical industry automatic

operation and remote control are highly developed. In rolling mills the electrification of main roll drive and controls has resulted in automatic continuous production. Stocking operations in blast furnaces are becoming completely automatic through electric control. Machinery has been devised for the continuous strip sheet rolling of steel sheets and tin plate, which was formerly done on hand rolls. Remote control is most highly developed in certain hydroelectric power plants, in which not a single worker is present and reports are made by automatic electric signals.

These developments in the construction and operation of machinery are not characteristic of all plants, but they are an ever growing tendency inherent in machinery. The fullest expression of this tendency is the machinery and the auxiliary equipment utilized in the mass production of automobiles, in which an elaborate development of the conveyor system is the basis of the working process, accompanied by the most intensive division of labor and specialization of machines. An opposite but complementary development is the increasingly large automatic machine which combines a series of operations formerly performed by separate machines, and which is the basis of the automatic plant. Automatic machinery, the increasing division of labor and specialization of machines and the automatic plant are completing the revolution in the relations between labor and production.

LEWIS COREY

See: INVENTION; TECHNOLOGY; MACHINERY, INDUSTRIAL; HANDICRAFT; FACTORY SYSTEM; INDUSTRIAL REVOLUTION; MECHANIC; ENGINEERING; POWER, INDUSTRIAL; IRON AND STEEL INDUSTRY; ELECTRICAL MANUFACTURING INDUSTRY; ELECTRIC POWER; METALS; MINING; UNEMPLOYMENT.

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MACÍAS PICAVEA, RICARDO (1847-99), Spanish sociologist. Macías Picavea studied at León and at the universities of Valladolid and Madrid. He was a profound sociologist, extremely well prepared for the discussion of the evils afflicting Spain, the subject which constituted his constant preoccupation. The philosophic discipline which he acquired as a favorite disciple of the Krausist Julián Sanz del Río added precision and clarity to his powers of judgment. As a teacher of psychology, logic and ethics at the Instituto de Segunda Enseñanza of Tortosa and of Latin, geography and history at that of Valladolid he familiarized himself with the defects of Spanish education, which were among the principal bases of the national decadence. As a journalist he came in contact with the majority of the national literary, artistic and political problems and as an indefatigable traveler and geographer he acquired a full knowledge of the conditions of the peninsula. For a time he was in politics, professing democratic principles. But while he

saw the national defects clearly he did not allow himself to be dominated by pessimism, for he considered the fundamental conditions and characteristics of the nation to be good. He found the origin of the mischief in the deflection from the path of inherent development which had been suffered by the national life as a result of the Germanic background and orientation, especially the Caesarism, of the Austrian dynasty; in his time the resulting collapse reached its culmination in the defeat in the war with the United States, a disaster which he was among the first to foretell. When this occurred, he wrote with feverish anxiety and haste his greatest work, *El problema nacional* (Madrid 1899). Discounting the inevitable defects of a study which is so comprehensive—it exposes the reality of the decadence through an analysis of the national physical environment, population and cultural, educational, moral, religious, political and economic life and gives the causes and remedies for the decadence—it abounds in highly original observations and in judgments which have not been surpassed. The numerous, all embracing measures proposed include methods designed to restore the soil, vitalize education and revive and expand the traditional corporate, regional and local life of the nation and effect its participation in government. For the execution of the reforms Macías Picavea desired a tutelary dictatorship under the direction of a man of the hour. The book aroused great admiration among the intelligent. Whatever its intentions, it was among the outstanding examples of the "literature of 1898," which helped to evoke a feeling of deep pessimism, the prelude and in part the stimulus of the present national revival.

B. SÁNCHEZ ALONSO

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MACIEJOWSKI, WACŁAW ALEKSANDER (1793-1883), Polish jurist. Maciejowski's work may be said to have begun in 1820, when, called before a commission which was undertaking a revision of the laws of the Polish Kingdom, he demanded in accordance with the principles of the historical school that it should be based upon the native Polish law. When in 1832 he published the first two volumes of his major work, a history of Slavic law, he achieved almost instant renown. The work was translated into German and Serbian and a supplementary work on the

history, writings and legislation of the Slavs was translated into Russian and in part into French. Knowledge of the history of Slavic law was very elementary when Maciejowski began his work. He had to make himself acquainted with the printed sources of Slavic law and he even worked with manuscripts, publishing a number of valuable Slavic legal monuments, which until then had remained unknown. At a time when the interrelationship of the various bodies of Slavic law was not yet understood he showed that they arose from a common source of prehistoric Slavic legislation. Embracing in contrast to his predecessors—for instance, the Poles, Tadeusz Czacki, Jan Wincenty Bandtkie—a considerably wider number of sources and with his superior mastery of the historical method he was able to establish his thesis of the common origin of the Slavic laws by showing the analogies existing among them. He thus did away with the erroneous theory that the Slavic laws were taken over from alien sources. He also pointed out, as has been confirmed by further investigation, that Slavic elements were retained longest in Polish law. Despite some faults—he often allowed himself to be transported by fantasy—he nevertheless performed a tremendous service in stimulating the study of law among the Slavs and especially in Poland.

STANISŁAW KUTRZEBA

Important works: *Historia prawodawstwa słowiańskich*, 4 vols. (Warsaw 1832-35; 2nd ed., 6 vols., 1856-65), tr. by F. J. Buss and M. Nawrocki as *Slavische Rechtsgeschichte*, 4 vols. (Stuttgart 1835-39); *Pamiętniki o dziejach, piśmiennictwie i prawodawstwie słowian* (Memoirs of the history, literature and legislation of the Slavs), 2 vols. (Warsaw 1839), partially tr. as *Essai historique sur l'Église chrétienne primitive de deux rites chez les slaves* (Leipsic 1840); *Piśmiennictwo polskie od czasów najdawniejszych aż do roku 1830* (Polish writings from the earliest times to the year 1830), 3 vols. (Warsaw 1851-52); *Polska aż do pierwszej połowy XVII. wieku pod względem obyczajów i zwyczajów* (Polish customs and usages up to the first half of the 17th century), 4 vols. (Warsaw 1842); *Pierwotne dzieje Polski i Litwy* (Early history of Poland and Lithuania) (Warsaw 1846); *Historia włościan i stosunków ich politycznych, społecznych i ekonomicznych* (History of the political, social and economic conditions of the peasant) (Poznań 1874); *Historia miast i mieszczan w krajach dawnego państwa polskiego* (History of towns and townspeople in ancient Poland), ed. by Michał R. Witanowski (Poznań 1890).

Consult: Baranowski, I. T., in *Wiek XIX: sto lat myśli polskiej* (Nineteenth century: one hundred years of Polish thought), vol. vii (Warsaw 1912) p. 478-88; Adamus, Jan, "W. A. Maciejowski a program srovnávacího dějepisu práv slovanských" (W. A. Maciejowski and the program of comparative history of Slavic law) in *Právny Obzor*, vol. xv (1932) 145-52.

MCKENZIE, SIR JOHN (1838-1901), New Zealand statesman. McKenzie, a Scottish shepherd, emigrated to New Zealand as a farm laborer in 1860. He became a small landowner, won a seat in the provincial council of Otago and in 1881 was elected to Parliament. When the Liberal-Labour party, drawing much of its support from small farmers and farming aspirants, came into office in 1891 and embarked upon its experimental program he became minister of lands and he held this office until 1900. McKenzie's experiences as a crofter in Scotland had strongly convinced him of the right of a farming peasantry to have access to the soil, and his belief in the evils of landlordism was confirmed by the dummieing and other devices of land aggregation which were particularly rife in Otago and which were at that time aggravating an economic depression. He was largely responsible for the important measures of land reform carried through by Ballance's and Seddon's cabinets, measures not motivated by doctrinaire devotion to any theoretical conception but designed to meet a concrete situation. These measures provided progressive taxation of unimproved values; compulsory repurchase of land for closer settlement; the conservation of crown-land through the development of a revised leasehold policy with further limitation of areas alienable; credit advances to small farmers; and the creation of a Department of Agriculture. They were the chief means of creating a group of small state tenants and freeholders and of ending the economic deadlock, but they were aided by the advent of a period of rising prices and by the development of refrigeration for meat and dairy products. The most permanent and valuable aspects of McKenzie's program are the credit advances and the expert guidance provided by the Department of Agriculture. These have established themselves as governmental functions of almost unchallenged usefulness.

J. B. CONDLIFFE

Consult: Condliffe, J. B., *New Zealand in the Making* (London 1930) p. 181-92; Reeves, W. Pember, *The Long White Cloud (Ao Tea Roa)* (3rd ed. London 1924) p. 262-65; New Zealand, Department of Lands and Survey, *Land Legislation and Settlement in New Zealand*, by W. R. Jourdain (Wellington 1925) p. 31-34.

MACKENZIE, SIR WILLIAM (1849-1923), Canadian capitalist. Mackenzie was born at Kirkfield, Ontario, and during his early years was school teacher, merchant and lumber con-

tractor for the construction of several Ontario railroads. In 1884 he undertook large lumber contracts for the mountain division of the Canadian Pacific Railway and in 1888 in partnership with Donald Mann, H. S. Holt and James Ross began constructing the Canadian Pacific short line through Maine and important lines in western Canada. His close relation with Mann, a master railroad builder, the capital he acquired from railroad construction and the connections he made with financial and technical experts enabled Mackenzie to acquire large interests in public utilities in São Paulo, Rio de Janeiro, Monterey (California), Winnipeg and Toronto; in that field he was able to effect combinations bringing "into a harmonious union seemingly conflicting interests." He also acquired considerable interests in shipping, mining and life insurance companies.

In 1896 Mackenzie, definitely linked to the metropolitan activity of Toronto, entered the field of continental railroading by acquiring a small line in Manitoba. Thoroughly efficient at railroad building, his partnership met demands for railroads to compete with the Canadian Pacific and to open up sections of western Canada, which the Canadian Pacific had been forced to neglect by the necessity of following the southern route. To reach ocean ports and provide an outlet for the wheat trade his line, the Canadian Northern, was forced to build large non-remunerative stretches of road east and west; the line was completed against the pressure of governments and often by pressure on them. With the cessation of the land grant policy the Canadian Northern was compelled to rely on federal and provincial government guaranties of bonds and on the sale of common stock, but with the tightening of the capital market immediately prior to the World War and the wartime decline in immigration survival became impossible. In 1918 the insolvent Canadian Northern gave way to the Canadian National Railways. Despite the line's failure Mackenzie by securing efficient engineers, by cautious financing, by developing traffic and by securing capital at low rates had contributed substantially to the eventual success of the Canadian National Railways. He played a vital role in the expansion and growth of urban and pioneer communities which took place from 1900 to 1914.

HAROLD A. INNIS

Consult: Hanna, D. B., *Trains of Recollection* (Toronto 1924) ch. viii; Skelton, Oscar D., *The Railway Builders*, *Chronicles of Canada series*, vol. xxxii (Toronto

1916); Innis, H. A., "Government Ownership in Canada" in Verein für Sozialpolitik, *Schriften*, vol. clxxvi (Leipsic 1931-32) pt. iii, p. 241-79; MacGibbon, D. A., *Railway Rates and the Canadian Railway Commission* (Boston 1917); Canada Railway Inquiry, Royal Commission to Inquire into Railways and Transportation in Canada, *Report* (Ottawa 1917) pt. iii; Canada, Parliament, "Documents Relative to the Government Guarantee of the Bonds of the Canadian National Railway," *Sessional Papers*, vol. xlviii (1914) nos. 269 b, i, j, l, m.

MACLAY, WILLIAM (1737-1804), American politician. Maclay was in many respects a typical product of the piedmont region. The son of a Scottish immigrant, he was born in New Garden township, Pennsylvania, and passed most of his life in the Susquehanna valley, residing on a farm near Harrisburg. He worked as lawyer, farmer, surveyor and land speculator, supported the revolution and after it held various legislative and judicial posts. In January, 1789, the Pennsylvania legislature elected him to the United States Senate, where he served until 1791. During his short term Maclay kept a journal in which he recorded caustically and with elaborate care the proceedings of the upper house of the First Congress of the United States. This work is not only an invaluable source for the political and social history of the period but it also indicates clearly the economic reasons behind the formation of the Federalist and Republican parties. As a western Democrat Maclay came into conflict with the dominant mercantile group in Philadelphia. This hostility was quickly extended to similar groups in New York and New England, and the antagonism was sharpened by his Anglophobia, agrarianism and devotion to states' rights. Every important Federalist measure except the tariff of 1789 met with his unqualified condemnation. The judiciary bill was the "gunpowder-plot of the Constitution"; the funding system he called "that political gout of every government which has adopted it"; the establishment of a national bank and the assumption of state debts were schemes of shameless speculators; the excise was a Pandora's box of civil strife. Federalism, in his eyes, was a way station on the road to monarchy.

Because of his bitter opposition to the Hamiltonian system it has been claimed that Maclay was the founder of the Republican party; but this contention has little validity. His suspicious nature and dour individualism prevented any real cooperation with Jefferson and Madison, who emerge from his pages with little more credit than do Hamilton and Adams. Professing

to be guided by principle alone, he was profoundly affected by personalities; and rheumatism made him misanthropic. His brief senatorial career ended without the attainment of any of his purposes, one of the most important of which was the location of the national capital on the Susquehanna River; but Maclay had his revenge on his political enemies in his brilliantly written *Journal*.

ARTHUR P. WHITAKER

Works: Journal of William Maclay, ed. by E. S. Maclay (New York 1890; new ed. with an introduction by Charles A. Beard, 1927).

Consult: Beard, C. A., Economic Origins of Jeffersonian Democracy (New York 1915) p. 167-95.

MCLENNAN, JOHN FERGUSON (1827-81), Scottish ethnologist. McLennan became a member of the bar in Edinburgh in 1857 and for some time after 1871 served as parliamentary draftsman for Scotland. While writing the article "Law" for the eighth edition of the *Encyclopædia Britannica* in 1857 he became interested in the Spartan and Roman marriage ceremony of collusive abduction, which he interpreted in terms of the evolutionary hypothesis that symbolical forms of behavior were survivals of previous actual relationships. He developed the theory that female infanticide among primitive hordes led to a scarcity of women and therefore necessitated marriage outside the tribe, a practise which he designated as exogamy. Contending that only after a considerable advance in civilization did tribes join in political union permitting peaceful intertribal marriages, he held that wives could be obtained only by capture, the forms of which survived as symbols after force was no longer necessary. Subsequent research has proved that McLennan exaggerated the extent of infanticide and the prevalence of marriage by capture; although his term exogamy has become incorporated into the vocabulary of anthropology, his explanation of its origin is now regarded as untenable. Independently of Bachofen and Morgan, McLennan controverted the hypothesis, put in its most cogent form by Maine, that the patriarchal family was the original basic unit of social organization; he argued that an original promiscuity was superseded by the tracing of kinship through the female line, a practise which universally preceded descent through the male line, because of uncertain paternity involved in polyandry. He interpreted the levirate as being derived from polyandry. In his bitter attack on Morgan he

failed to grasp the sociological significance of kinship terms and held them to be merely terms of address. McLennan's controversies with his contemporaries gave impetus to significant research into the social organization of primitive societies.

BERNHARD J. STERN

Works: *Primitive Marriage* (Edinburgh 1865), reprinted in *Studies in Ancient History* (London 1876, new ed. 1886); *The Patriarchal Theory*, ed. by Donald McLennan (London 1885); *Studies in Ancient History*, 2nd ser. ed. by E. A. B. McLennan and Arthur Platt (London 1896).

Consult: Morgan, L. H., *Ancient Society* (New York 1877) p. 509-21; Tylor, E. B., in *Academy*, vol. xx (1881) 9-10; Stern, B. J., *Lewis Henry Morgan: Social Evolutionist* (Chicago 1931).

MACLEOD, HENRY DUNNING (1821-1902), English economist. Macleod is one of the more remarkable of that great number of self-made economists who, discovering certain problems neglected by orthodox economists, believed that it was their task to rebuild the science from its foundations and who by attempting to do so with insufficient equipment failed to secure recognition even for their real contribution. He was the son of a large Scottish landowner and prominent free trader parliamentarian and was trained as a lawyer. As chairman of a local committee on the poor law administration he distinguished himself at a relatively early age by recommending and successfully establishing the first poor law union in Scotland. His interest in economics as a science did not begin until 1854 when immediately after his acceptance of a directorship of the Royal British Bank he found himself engaged in a law case on the powers of the bank under the Joint Stock Banking Act of 1845. This case led him into extensive historical and theoretical studies, which were, according to a characteristic statement of his later years, "the origin of the modern Science of Economics." The first product of these studies, *The Theory and Practice of Banking* (2 vols., London 1855; new ed. 1902-11), is his most important work. Its exposition of the historical development of the policy of the Bank of England has long been the only convenient source of information for the study of those problems; even at the present time it has not been completely superseded. On most points Macleod adheres to the theories of the Bullion Report and he was one of the first to obtain a clear grasp of the role of discount policy. Of relatively less importance are his rather vague views on the relation

between credit and capital, which were widely discussed and severely criticized. He insisted that the essential function of the bank was as a "manufactory of credit" and was probably the first to give a detailed account of the process by which bank credit is created (see particularly the article "Credit" in his *Dictionary* . . .). It is noteworthy, however, that his theories never led him, as might have been expected, to advocate unsound maxims of monetary policy.

From *The Theory and Practice of Banking* he proceeded to an attempted reconstruction of economic science in general, frequently restating his views on books whose titles were changed but whose subject matter was only slightly modified. A typical disappointed innovator, his distaste for the dominant school of economics was increased by repeated failures to obtain a university chair. The fact that after the disastrous failure of his bank in 1856 he with his fellow directors had been charged with a conspiracy to defraud and found guilty made his position still more difficult. In his theories, which were sometimes very ingenious but never completely worked out, he followed Lauderdale, Bastiat and Bailey and, particularly in his discussion of the theory of value, he had glimmerings of ideas which were later developed by the marginal utility and the mathematical school. Of the projected two volumes of his *Dictionary of Political Economy* (London 1858-63) only the first was published, but a portion of the material collected for it appears to have been used for his *History of Economics* (London 1896). In general Macleod found more recognition abroad, especially in France, than in England, although the British government employed him from 1868 to 1870 to prepare a digest of the laws relating to bills of exchange.

FRIEDRICH A. HAYEK

Other important works: *The Elements of Political Economy* (London 1858; 2nd ed. as *The Principles of Economic Philosophy*, 2 vols., 1872-75; 3rd ed. as *Elements of Economics*, 2 vols., 1881-86); *The Theory of Credit*, 2 vols. (London 1889-91, 2nd ed. 1893-97); *On the Definition and Nature of the Science of Political Economy* (Cambridge, Eng. 1862); *The Elements of Banking* (London 1876, 7th ed. 1902); *On the Modern Science of Economics* (Manchester 1887); *Bimetallism* (London 1894); *A History of Banking in all the Leading Nations*, 2 vols. (New York 1896); *Indian Currency* (London 1898).

Consult: Richelot, H. A., *Une révolution en économie politique* (Paris 1863); Lindner, M., *Die Kredittheorie von Henry Dunning Macleod* ([Görlitz] 1929); Koopmans, N. G. Cnoop, *Macleod's Kredittheorie* (Leeuw 1866); *Economic Journal*, vol. xii (1902) 583-84.

McMASTER, JOHN BACH (1852-1932), American historian and university professor. McMaster's reputation as a historian rests mainly upon *A History of the People of the United States from the Revolution to the Civil War* (8 vols., New York 1883-1913; new ed. 1927-29). The publication of the first volume gained for the author instant recognition and an appointment by the University of Pennsylvania to the chair of United States history, one of the earliest of its kind. During his forty years in the classroom and in the seminar he exerted a deep influence on his students, and a notable group of American historians acknowledges its debt to his instruction.

Influenced, it would seem, by the work of J. R. Green in England, McMaster determined to throw the major emphasis on the people of the United States rather than on the nation as a political entity. Although he was unable to maintain this distinction, his early volumes, which are probably the best of all his work, widened historical horizons by their stress upon social and economic history, their attention to the everyday life of ordinary folk, their appreciation of the importance of the frontier and their demonstration of the value of newspapers as guides to the past. They made clear to American historians that "the growth of democratic ideas had given dignity to the study of the individual."

McMaster's reliance upon the press, however, affected the balance and arrangement of his chapters and adversely influenced his style, which at the outset he had attempted to model on that of Macaulay. Space is too often allotted to the picturesque and the unusual at the expense of the more broadly significant currents; emphasis is produced by long quotations and the massing of details, and summaries are noticeably few. Because the manner and not the meaning of events is stressed, the narrative frequently lacks both relief and perspective.

McMaster's inclusive view of history places him among the founders of the "new" school of historians; while his evident patriotism, his belief in the superior virtues and manifest progress of Anglo-Saxons in the United States since 1776, his partiality for analogies between the "then" and the "now" and his chary use of footnote citations link him with his predecessors.

WILLIAM T. HUTCHINSON

Other important works: *With the Fathers*; *Studies in the History of the United States* (New York 1896); *The Acquisition of Political, Social, and Industrial Rights*

of Man in America (Cleveland 1903); *The Life and Times of Stephen Girard, Mariner and Merchant*, 2 vols. (Philadelphia 1918); *The United States in the World War*, 2 vols. (New York 1918-20); *A History of the People of the United States during Lincoln's Administration* (New York 1927).

Consult: Paxson, F. L., "The New American History" in *Quarterly Review*, vol. ccxxiii (1915) 159-81; Fish, C. R., "Review of McMaster's History of the People of the United States," and Hutchinson, W. T., "John Bach McMaster, Historian of the American People" in *Mississippi Valley Historical Review*, vol. i (1914-15) 31-43, and vol. xvi (1929-30) 23-49.

McNEILL, GEORGE EDWIN (1837-1906), American labor reformer. The son of a Scotch-Irish immigrant who was an active antislavery propagandist, McNeill went to work at fifteen in a textile mill in Amesbury, Massachusetts, and later tried shoemaking, salesmanship and other occupations. In 1856 he removed to Boston, where he came in touch with the reformers interested in the shorter hour movement. Influenced by Ira Steward's theory that shorter hours increase wages by creating new wants, he organized and agitated from 1863 to 1874 for the eight-hour day. He was active in most of the reform societies which followed the Civil War and the panic of 1873. From 1884 to 1886 he was secretary-treasurer of the Massachusetts district of the Knights of Labor and struggled against the split of 1886 between the Knights and the trade unions. He helped organize the American Federation of Labor and in 1898 was its fraternal delegate to the British Trades Union Congress. In addition to writing for a number of labor papers he edited and largely composed the first real attempt at a history of the American labor movement.

He was first deputy of the Massachusetts Bureau of Statistics of Labor from its establishment in 1869 until 1873, and he served on state commissions on education, tax revision and uniform legislation. As candidate for mayor of Boston in 1886 he received about three thousand votes. In mid career he became an insurance agent and in 1883 organized the Massachusetts Mutual Accident Insurance Company, of which he was general manager from 1892 until the time of his death.

His career is illustrative of the social order and trend of the United States in the nineteenth century. To rise from a mill hand into the middle class by way of reform, politics, journalism and business was not uncommon. The limited nature of McNeill's reformist ideas was typical, and only his retention of labor sympathy distin-

guishes him from many who moved in a like direction.

NORMAN J. WARE

Important works: *Argument on the Hours of Labor Delivered before the Labor Committee of the Massachusetts Legislature* (New York, n.d.); *The Labor Movement: the Problem of To-day*, ed. by G. E. McNeill (Boston 1887).

Consult: Foster, Frank K., in Massachusetts Bureau of Statistics of Labor, *Labor Bulletin*, vol. xii, no. 2 (1907) 83-98.

MACONOCHIE, ALEXANDER (1787-1860), English prison reformer. In 1840 Maconochie, a captain in the Royal Navy, became governor of the penal colony at Norfolk Island, Australia, to which notorious convicts were transported from England. He found the colony to be a veritable hell hole in which mutinies, crimes and vice abounded. Maconochie instituted a series of reforms which he had already enunciated in tracts on penal reform. His chief innovation was the mark system, under which each prisoner upon entrance was debited with marks depending upon the gravity of the offense; these marks were redeemable by good conduct, and when all were canceled the prisoner was considered for conditional release on "ticket of leave." The daily redemption of marks was also used as a credit against which the prisoner could draw food and supplies. The aim was to inculcate thrift and a sense of relative values. Maconochie's ingenuity expressed itself also in other penal reforms, such as the employment of music as a reformatory agency, provision for the cultivation of gardens by prisoners and the institution of a rudimentary system of inmate self-government. Maconochie's reforms were incorporated by Sir Walter Crofton into the Irish system of reformation and thence with modifications into the American reformatory regime. Maconochie's penal philosophy was: "Restrain men rather by making virtue easy, and good conduct pleasant, than merely by making vice difficult, and misconduct painful." After a brief period in charge of the Borough Prison of Birmingham, Maconochie was removed because the magistrates objected to his opinions as being "too abstract."

SHELDON GLUECK

Important works: *Thoughts on Convict Management, and Other Subjects Connected with the Australian Penal Colonies* (Hobart Town 1838); *Crime and Punishment* (London 1846); *The Mark System of Prison Discipline* (London 1855); *On Secondary Punishment* (London 1848).

Consult: Glueck, S. and E. T., *Five Hundred Criminal Careers* (New York 1930) ch. ii; Carpenter, Mary,

Reformatory Prison Discipline as Developed by the Rt. Hon. Sir Walter Crofton, in the Irish Convict Prisons (London 1872).

MACQUARIE, LACHLAN (1761-1824), Australian colonial administrator. Macquarie, a Scottish infantry colonel, became governor of New South Wales after the Bligh mutiny of 1808 and ruled the young colony through the important period from 1810 to 1821. He changed the entire point of view regarding the Australian settlements. In his own words, he found a jail and left a colony. The change was partly due to his great material achievements. He restored order after the lax conditions permitted by the naval governors, promoted exploration, opened up the new lands across the Blue Mountains, established a bank of issue and carried out public works on an unprecedented scale. More important, however, was his contribution to the status of the colonists. He argued that the future of the colony lay with free men and that every convict, once he had satisfied his sentence, should start afresh and receive all the rights of free men. This was a revolutionary attitude in a convict colony, where both expirers, who had served their term, and emancipists, who had been released on probation, were viewed as definitely inferior politically, socially and morally. Despite the opposition of officials and free settlers he appointed expirers and emancipists to important offices, including magistracies, and he made a strong fight for the right of emancipist attorneys to practise in the courts of the colony. The Parliamentary Committee on Transportation praised Macquarie's convict policy in 1812, but numerous complaints eventually led the Colonial Office in 1819 to order an inquiry by Commissioner Bigge into the affairs of the colony. Bigge reported adversely on Macquarie's administration, but Macquarie's cause eventually won. Australia became not a jail but an oversea dominion of free men associated on an equalitarian basis.

STEPHEN H. ROBERTS

Consult: Phillips, Marion, *A Colonial Autocracy*, London School of Economics, Studies in Economics and Political Science, no. 16 (London 1909); Jose, A. W., *Builders and Pioneers of Australia* (London 1928) p. 3-35.

MACVANE, SILAS MARCUS (1842-1914), American economist. MacVane was born in Prince Edward Island and graduated from Acadia College in 1865 and after an interval of teaching graduated from Harvard College in

1873. After another interval of teaching he became in 1875 instructor in political economy at Harvard and remained with that institution until his retirement in 1911. He shifted early from political economy to history, becoming assistant professor in the latter subject in 1883 and professor in 1886. His activity as a teacher covered a wide range of work. He taught in straightforward and effective fashion economics, history, international law, constitutional law, modern government, political theory.

All MacVane's work was characterized by sound sense, sober and discriminating judgment, simplicity of statement, wide information but no deep scholarship. His intellectual interests were those of the English don rather than of the German professor. He took an active part in the administrative work of Harvard College and indeed made himself indispensable in some parts of it. In 1890 he published *The Working Principles of Political Economy* (2nd ed. New York 1897) and subsequently in 1899 a translation and revision of Seignobos' *Histoire politique de l'Europe contemporaine*. Among periodical articles were a paper on the "Austrian Theory of Value" in the *Annals of the American Academy of Political and Social Science* (vol. iv, 1893-94, p. 348-77) and a number of articles on theoretic subjects in the *Quarterly Journal of Economics*. The most notable of these latter were those which criticized the economic theories of Francis A. Walker, then recently put forth.

MacVane was clear headed, a good straight reasoner after the fashion of the older school, a keen and dangerous critic, a user and fashioner of old ideas rather than a creator of new ones. In his best work, the debate with Francis Walker in the *Quarterly Journal of Economics*, he showed the weaknesses upon the other side but was not himself free of the weaknesses which ran through the traditional and conservative thought of his time, and advanced matters little. His *Working Principles*, originally designed as a textbook, served its purpose well as a simple yet by no means superficial exposition of the best in the conservative thought of his day.

FRANK W. TAUSSIG

MACY, ROWLAND HUSSEY (1822-77), American merchant. Macy established a shop for fancy goods in New York in 1858 and added a millinery department in 1863. He had added six more departments by 1869 and in 1877 had a total of twenty-one. Although data are scarce, economists tend to believe that American stores

were not departmentalized until after 1850 and that widespread adoption of departmentalization began during the panic of 1873. Macy was unquestionably the pioneer in the development of the American department store, but it is difficult to say just how much he copied from the Bon Marché of Paris, which he greatly admired.

Macy adopted the fixed price policy, which was still exceptional, in 1858 and originated the shaded price policy—\$1.98 instead of \$2.00—in order to prevent thefts by employees. These two policies have come into general use because of their effect on customers. His most striking innovation was cash buying and selling. Few department stores have imitated the policy of buying as well as selling for cash which has been followed by R. H. Macy & Co. with slight modifications for over half a century. To what extent this policy has contributed to the success of the store it is impossible to say; the heads of the firm have maintained that Macy prices are low "because we sell for cash only."

A year after Macy's death the store passed into the hands of C. B. Webster and Jerome B. Wheeler. In 1887 it was purchased by Isidor and Nathan Straus and it is now organized as a corporation controlled and operated by their children.

WINIFRED RAUSHENBUSH

Consult: Hungerford, Edward, *The Romance of a Great Store* (New York 1922); New York Tribune (May 1 and 3, 1877); Nystrom, Paul H., *Economics of Retailing* (3rd ed. New York 1930); Doubman, J. Russell, and Whitaker, John R., *The Organization and Operation of Department Stores* (New York 1927).

MADERO, FRANCISCO INDALECIO (1873-1913), Mexican politician. Madero, a member of an influential land and mine owning family, was educated in Mexico, France and the United States. In his political ideas he was a not very remote descendant of the liberal nationalists who had framed the federalist constitution of 1857. He entered politics by supporting local opposition candidates in the decade when Mexico was becoming much concerned with its fate after the aged dictator Díaz should disappear from the scene. The growing economic and political imperialism of the United States augmented this concern. In 1908, when political agitation was stimulated by the president's indication that he intended to restore constitutional government, Madero published a book, *La sucesión presidencial en 1910*, opposing his reelection. It protested against Díaz' establishment de facto of a centralized absolutism which had resulted

in corruption and favoritism in administration; despoilment of Indian lands and enslavement and extermination of the Indians; oppression of labor; neglect of agriculture; mass ignorance and drunkenness; and excessive servility toward the United States. According to Madero, the cynical, corrupt and materialistic despotism weakened patriotic sentiment and menaced national safety. Nevertheless, he was appreciative of the material progress achieved under Díaz, although he attributed it to developments throughout the world. He praised the Porfirian peace, which, he concluded, made possible the restoration of democracy, whose greatest enemy was not the ignorance of the masses but militarism. As neither the dictator nor those who were groomed as his successors could be relied upon to restore the constitution, he called upon Mexicans desiring to maintain the national morale and to avert bloody revolution to organize a political party which should struggle peacefully for the triumph of free suffrage and the principle of no reelection. The book reveals the essentially political and humanitarian character of Madero's thought and suggests but few concrete measures of social reform; before everything the constitution, which represented the national aspirations, must be reestablished. Madero's economic thought consisted largely of an admiration for Díaz' treasury surpluses. He possessed considerable insight into the workings of the dictatorship but he failed to understand the character of the national social structure and the superficiality of the Porfirian peace, during which there developed conditions favorable to intense class and racial struggle.

La sucesión presidencial en 1910 exerted a great influence and its author became the presidential candidate of the Anti-Reelectionist party. He was arrested and Díaz was reelected in July, 1910. Released from imprisonment, Madero proclaimed the revolutionary "plan of San Luis Potosí," dated October 5, which declared the elections illegal and promised the restitution of lands wrongfully taken. In May, 1911, Díaz was overthrown by those who for various reasons opposed the *Científico* regime, by the disinherited who were attracted by the new era envisioned by Madero, and by economic depression. In October Madero was elected president. Once in office the "apostle" of the revolution, idealistic, inexperienced, a poor executive, surrounded by members of his family and other representatives of his class, demonstrated his inability to effect the radical reforms which

the masses awaited with impatience. At the same time that the agrarians were alienated, counter-revolutions broke out on behalf of ambitious militarists, landholding elements and foreign, especially American, capitalistic interests. Madero was treacherously overthrown and assassinated; reaction triumphed under Huerta.

MAX LEVIN

Works: *Estudio sobre la conveniencia de la construcción de una presa en el Cañón de Fernández, para almacenar las aguas del río Nazas* (San Pedro, Coahuila 1907); *La sucesión presidencial en 1910* (San Pedro, Coahuila 1908; 3rd ed. Mexico City 1911); *El partido nacional anti-reeleccionista y la próxima lucha electoral* (San Pedro, Coahuila 1910).

Consult: Ramos, Roberto, *Bibliografía de la revolución mexicana*, Monografías Bibliográficas Mexicanas, no. 21 (Mexico City 1931) p. 256-57; Callcott, Wilfrid H., *Liberalism in Mexico, 1857-1929* (Stanford University 1931) ch. ix; Priestley, Herbert L., *The Mexican Nation, a History* (New York 1923) ch. xxiv.

MADISON, JAMES (1751-1836), American statesman. Madison was the inventive genius in the formation of the American political system, and by reason of the influential role which he played in the federal convention has been called the father of the constitution. His classical training as an undergraduate at Princeton was followed by graduate work centering around a minute study of Montesquieu and the reading of Hobbes, Locke, Sidney, Pufendorf and other writers on political science. He was essentially a scholar in politics, blending together vast knowledge and profound insight into human nature.

In the federal convention and in his numerous contributions to the *Federalist* he advocated a system of government in which democracy should be reconciled with the security of private rights. He saw that the central problem of democracy is not the maintenance of equality but the preservation of liberty. Subscribing to Locke's labor theory of property he attributed the sacredness of property rights to their labor origin. Property rights should not overrule personal rights, and thanks to the wide diffusion of property in the United States the power of property to oppress liberty was, Madison thought, a remote contingency. Property at that time was chiefly in the form of land; but Madison foresaw with no little clarity that if other forms of property should arise through the growth of manufactures and commerce, the majority of citizens would become dependent on the wealth of a few and society be divided into a large number

of indigent laborers and a few wealthy capitalists. The extreme individualism with regard to property rights fostered by Madison has been enhanced by the Fourteenth Amendment.

Madison believed that democracy could be reconciled with the security of private rights if the factional spirit could be curbed. But the causes of faction he traced to the nature of man, where latent dispositions are brought into different degrees of activity according to the different circumstances of civil society. Although these causes could not be removed, the control of the effects was within human power. "Enlarge the sphere," said Madison, "and thereby divide the community into so great a number of interests and parties, that in the first place a majority will not be likely at the same moment to have a common interest separate from that of the whole or of the minority; and in the second place, that in case they should have such an interest, they may not be apt to unite in the pursuit of it." Madison's ideal was that of a balanced government as set forth by Montesquieu; the equilibrium of power which the latter had thought necessary to balance the enormous preponderance of royalty in England Madison conceived to be equally essential in the United States as a restraint upon temporary majorities in pursuit of their selfish interests.

As an outstanding anti-Federalist he displayed polemic skill, particularly in his contribution to the Virginia and Kentucky Resolutions of 1798; and along with his collaborator and ever congenial intellectual intimate, Jefferson, helped to carry over into a more complicated era the ideals of agrarian democracy. His later political career as secretary of state under Jefferson (1801-09) and as president of the United States (1809-17) although involving him in many historically significant situations, such as the Louisiana Purchase and the War of 1812, was less productive of systematic ideology.

WILLIAM SEAL CARPENTER

Works: Writings, ed. by Gaillard Hunt, 9 vols. (New York 1900-10).

Consult: The Federalist, ed. by P. L. Ford (New York 1898); United States, Constitutional Convention, 1787, *Records of the Federal Convention of 1787*, ed. by Max Farrand, 3 vols. (New Haven 1911); Hunt, Gaillard, *The Life of James Madison* (New York 1902); Beard, C. A., *An Economic Interpretation of the Constitution of the United States* (New York 1913); Larkin, Paschal, *Property in the Eighteenth Century* (Dublin 1930); De Leon, Daniel, *James Madison and Karl Marx* (New York 1920); Carpenter, W. S., *The Development of American Political Thought* (Princeton 1930).

MADOX, THOMAS (1666-1727), English archivist and historian. Madox studied law at the Middle Temple but was never admitted to the bar. He was employed as a clerk in the office of the lord treasurer's remembrancer and in the Augmentation Office and in 1714 was made historiographer royal to Queen Anne and King George I. He was one of the official custodians of the national records, and the character of his first book, the *Formulare anglicanum* (London 1702), was determined largely by the nature of the records under his charge in the Augmentation Office. The text of this book consists of a large collection of mediaeval charters; but its peculiar importance lies in its introduction, wherein Madox discussed the structure of such documents in a manner never before attempted and not yet superseded. Madox is in fact the founder of the diplomatic study of the English private charter. His *The History and Antiquities of the Exchequer of the Kings of England* (London 1711; 2nd ed., 2 vols., 1769) was the first detailed history of one of the great English departments of state. In this work Madox submitted the pipe rolls of the twelfth and the early thirteenth century to an analysis which revealed the many sided activities of the mediaeval English Exchequer. It was the starting point for all subsequent research into the administration of England under the first Angevin kings. Although all the continuous records of the Exchequer are now in print down to the year 1198, the *History of the Exchequer* is still of great value as a study of Exchequer practise and as an index to the contents of the unpublished records of this department in the thirteenth century. The third of Madox' chief works, the *Firma burgi* (London 1726), is essentially a study of the financial relations of the English boroughs with the crown, illustrated like the *History of the Exchequer* by extensive quotations from national records, still in great part unprinted; the same method was employed in his posthumously published *Baronia anglica* (London 1736), an inquiry into the legal significance of baronial tenure in England.

Although the whole of Madox' significant work was published after 1700, he is allied in spirit to the great English historians of the seventeenth century and is indeed among the most eminent of that company. He rarely passed beyond the range of the materials which lay at hand in the national records of England, but he always regarded his record work as the illustration of history, which to him was the disinterested reconstruction of the past. The results

of this attitude are that the reputation of his work has suffered little from changes of fashion in historical writing, that it has influenced all subsequent research in related fields and that it still stands as a model of minute investigation in which the details are never allowed to obscure the wider view.

F. M. STENTON

Consult: Report of the Lords' Committees, Appointed . . . to View the Public Records (London 1719); Hazeltine, H. D., "Thomas Madox as Constitutional and Legal Historian" in *Law Quarterly Review*, vol. xxxii (1916) 268-89, 352-72; Poole, R. L., *The Exchequer in the Twelfth Century*, Oxford University, Ford Lectures, 1911 (Oxford 1912).

MAFFI, ANTONIO (1850-1912), Italian cooperative leader. Maffi was born in Milan and was self-educated. He engaged in the printing trade and achieved prominence through his abilities as propagandist and organizer. Inspired by Mazzini's idea of "association and liberty" as the solution of social problems, he argued for cooperation and mutualism based upon education, self-sacrifice and solidarity. He condemned the opposition of the ruling class to the peaceful improvement of working class conditions, which he regarded as the only real class struggle, advocating cooperation and mutualism as a constructive remedy and opposing the Marxian idea of class struggle. He helped to indoctrinate the cooperative movement with a class collaborationist philosophy not challenged until 1920, when the movement allied itself with socialism.

The first workman to be elected to the Italian national Parliament, Maffi actively supported ameliorative social legislation, especially in aid of producers' cooperative societies, and was largely responsible for a law empowering workmen's associations to undertake contracts for public works under very favorable conditions. In 1886 he helped promote the first congress of Italian cooperative societies, in which eminent Italian and foreign cooperators took part. The result was the founding of the Lega Nazionale delle Cooperative, of which he was general secretary and presiding genius until his death. He organized the "triple alliance" of cooperatives, mutualists and trade unions for joint legislative action aiming at the legal and economic enfranchisement of workers. Against the view held by many socialists that cooperation was futile he argued that by penetrating all economic and social life and by affecting production, exchange and legislation cooperation could provide a real solution to social problems. His view of coop-

eration as a powerful instrument of international peace and brotherhood became basic in the International Cooperative Alliance, and he lived to see right wing socialists converted to the cooperative idea.

FELICE MANFREDI

Consult: Il movimento cooperativo in Italia, ed. by F. Manfredi (Milan 1920).

MAFIA. The Sicilian word mafia is not found in Italian writings before the nineteenth century. Traina's Sicilian-Italian dictionary (1868) defines it as a neologism denoting any sign of bravado, a bold show; Mortillaro's dictionary (1876), as a word of Piedmontese origin equivalent to gang (*camorra*). Neither definition is exact. The word is employed by Sicilians in two different although related senses: on the one hand, it is used to denote an attitude which until recently has been fairly widespread among certain classes of Sicilians; on the other, it signifies a number of small criminal bands.

Mafia describes the attitude which assumes that recourse to legal authority in cases of persecution by private enemies is a symptom of weakness, almost of cowardice. It is an exaggeration of the sentiment, more or less common in Latin countries, that appeal to law against offenses involving personal insult, for instance adultery, is unmanly and that the duel is the proper means of recovering lost honor. Sicilian circles affected by mafist psychology held that many offenses must be avenged by personal action or by that of relatives and friends. Common theft, for example, was considered a sign of lack of respect indicating that the thief did not fear vengeance.

The mafist attitude, of which there were many degrees, was common in western Sicily and almost unknown in the eastern provinces, particularly Messina and Syracuse. It was practically non-existent among educated people as well as among the large class of sailors and fishermen and rare among all urban classes. It was most firmly rooted among peasants and large landowners.

By no means all people with such sentiments were actual or potential criminals. The great majority violated no law. When a person sharing mafist sentiments had relations with criminals he was usually actuated by a desire to prevent offenses against himself and not to commit them against others. The most serious consequence of such a tendency was the fact that refusal to report offenses to constituted authorities, which

would have been contrary to the mafist moral law of *omertà*, prevented the capture of criminals by the state and thus facilitated the formation and activities of bands of malefactors.

Mafia was never a vast association of malefactors with a hierarchy of leaders and ramifications throughout Sicily. In this respect it differed sharply from the highly unified Neapolitan Camorra, with which it had no relationship except that of similar criminal objectives. Mafia consisted rather of many small autonomous associations, each active over a limited district. Each association was a *cosca* (Sicilian dialect: *tuft*), generally having a membership of twelve to fifteen, although some were larger. There was no election of chiefs, authority being wielded by members long addicted to crime, who directed the movements of younger associates, superintended dealings with victims and divided booty. Insubordination and especially misappropriation of booty were considered violations of mafist honor and punished, sometimes with death. The relations between neighboring *cosche* might be cordial or so antagonistic that difficulties would have to be settled by shooting. The great majority of mafist murders grew out of rivalry between *cosche* or members of one *cosca*. While it is untrue that members of the various *cosche* used conventional words and gestures to recognize one another, they did have peculiar mannerisms, including pronunciations of certain words, frequent use of others, and a certain furtive and shuffling expression. To any experienced Sicilian these betrayed connection with a *cosca*.

The *cosche* engaged chiefly in cattle rustling, extortion and occasional kidnaping for ransom. Often an ally of the *cosca* would offer to recover stolen cattle for the owner, and if such an offer were accepted the cattle would soon be found wandering about the countryside and the "friend" would be indemnified for his "expenses" to the extent of a third or a half the value of the cattle. In regions where agriculture was intensive, a tribute system prevailed. Every landowner or tenant paid to the *cosca* an annual tax higher than the combined imposts of the state, province and commune. Refusal to pay was punished by destruction of trees and vines and the slaughter of livestock. Letters demanding the deposit of a sum of money at a designated place or its consignment to a designated messenger were a method generally used by novices. Kidnaping of wealthy individuals for ransom fell into disuse some twenty years ago because

of its difficulty. No woman or baby has been kidnaped for a decade, and no kidnaped person has been killed for three or four. The police have generally suspended efforts to discover the kidnapers until the victim has been freed. A *cosca* through more or less veiled threats would often induce a landowner to entrust the marketing of produce to one of its members or to lease his estate to persons in their confidence. In the first case small thefts by novices not associated with the *cosca* were prevented, a part of the produce being appropriated as payment by the *cosca* itself. In the second case a rebate, often half the lease price, was extracted.

In cattle rustling, the most common offense, two *cosche* collaborated. Stolen oxen and sheep would be dispatched to a commune fifty or more kilometers away, secretly butchered and consumed. Stolen horses and mules were sometimes sent as far as Tunis, where the mafists had connections with Sicilian emigrants. *Cosche* also have had close relations with criminal bands in the United States whose members were ex-mafists. A letter sent from America to a notorious Sicilian mafist announced a murder committed during its transit. The murder of a New York City police lieutenant, Petrosino, at Palermo in 1909 was perpetrated in cooperation with mafist criminals in America.

About 1878 Prefect of Police Malusardi, in whom the minister of the interior vested authority over all Sicily, exiled to the coastal islands several hundred criminals against whom precise evidence was lacking. Later, however, the *cosche* reorganized and perfected their methods of operation, and most of their members practised a trade from which they appeared to live. The government was long powerless to stop their crimes. Although the mafist chiefs were fairly well known, the police could offer no evidence but popular report. Few persons dared appear against the criminals. Even when a chief could be identified he could prove an alibi, and the youths who actually had perpetrated offenses were unknown. When the latter were arrested they rarely informed on those who had ordered them to commit an offense, for they would then not only be condemned but would also forfeit mafist honor and the help customarily given by the *cosca* to captives of the police.

But the chief obstacle to legal action was the political influence of the mafists, who in some communes dominated political elections. This power developed after the first important extension of the franchise in 1882 and increased after

universal suffrage was adopted in 1912. The poorest classes, now given the vote, were by no means most largely represented in the *cosche*; but because of ignorance and fear they yielded most easily to mafist threats and supported candidates endorsed by mafists. The *cosche* required their legislative tools to obtain for their members permission to carry weapons, to intercede with the police in their favor and to serve them in other ways. The question of public safety in Sicily was repeatedly discussed by the chamber and all ministers of the interior instructed the prefects of police to make no compromise with crime. Most ministers, however, also recommended support of the parliamentary candidacy of a mafist tool, and the prefects often carried out the second instruction while ignoring the first.

During recent years the mafist attitude has weakened. Immediately after the World War the general confusion and the ambitions of the younger members of the *cosche* to gain control led to a recrudescence of mafist activities and a series of murders within the *cosche*. Beginning about 1925, the Fascist government undertook a rigorous war against the mafia. In this struggle it was aided by the weakening of mafist sentiments resulting from the wider diffusion of culture and of material comforts and the more frequent contacts with the continent which followed upon the improvement of transportation and communication. The government pushed the fight with vigor and success, inducing victims to give sufficient proof to bring about many arrests and convictions. The Fascist system of appointing members of the legislature prevents mafist influence on elections. Today conditions of public safety in Sicily may be considered normal.

GAETANO MOSCA

See: CAMORRA; BRIGANDAGE; GANGS.

Consult: Wermert, Georg, *Die Insel Sicilien* (Berlin 1905) ch. xxviii; Herz, Hugo, "Die Kriminalität der Mafia" in *Monatsschrift für Kriminalpsychologie und Strafrechtsreform*, vol. i (1904-05) 385-96; Vaccaro, Angelo, "La mafia" in *Archives d'anthropologie criminelle*, vol. xvi (1901) 49-65; Mosca, G., "Che cosa è la mafia" in *Giornale degli economisti*, 2nd ser., vol. xx (1900) 236-62; Bruno, Cesare, *La Sicilia e la mafia* (Rome 1900); Cutrera, Antonino, *La mafia e i mafiosi* (Palermo 1900).

MAGDEBURG CENTURIATORS. The Magdeburg centuriators, of whom the leader and organizer was Matthias Flacius Illyricus, were the authors of the principal historical work pro-

duced by German Lutheranism in the Reformation period. The *Magdeburg Centuries* were planned by Matthias and other strict Lutherans who had gathered in Magdeburg to meet the crisis growing out of Emperor Charles v's attempt to follow up his victory over the Protestant Schmalkaldic League in 1547 and to reestablish Catholicism throughout his entire realm. The centuriators conceived the work as a comprehensive history of the church which should demonstrate that the Lutheran doctrine was the true doctrine and that the Roman papacy had been created and developed by Antichrist. When they had completed an exhaustive investigation of sources in numerous libraries outside of Germany as well as within, they subjected the material to historical criticism and then arranged it by centuries (whence the name). Only the first thirteen centuries of the Christian era were included. The various *Centuries* were uniformly divided into separate sections treating such subjects as church doctrine, ritual, discipline and government, learning, heresies, persecutions and martyrdoms. As a result of its arrangement the work lacks internal unity. Its principal significance for the development of historiography lies in the fact that the centuriators appreciably augmented the volume of hitherto known historical materials and that they applied to the treatment of this material the fundamental canons of humanistic historical method. They manifested due cognizance of the importance of social matters, expounding the relations of the church to society and to non-Christian religious associations as well as to the state; they made exhaustive investigations of the structure of the organizations produced by the church; they evaluated the influence of the Christian precept of brotherly love upon the practice of charity. Never before had such questions been treated in a great and connected church history. In estimating the intrinsic value of the work, however, it must be remembered that it was tendentious in the extreme. The centuriators never permitted their canons of historical criticism to lead them to a judgment adverse to their position. Besides providing an arsenal for Protestant apologists the *Centuries* stimulated and influenced historical writing among Protestants throughout Europe and evoked counterinterpretations from Catholics, such as Baronius. They remained the standard model for Protestant historiography down to the eighteenth century.

KARL VÖLKER

Works: The *Centuries* were first published as *Eccle-*

siastica historia . . . , 8 vols. (Basel 1559-74), rev. by L. Lucius, 3 vols. (Basel 1624). A new edition by S. I. Baumgarten and J. S. Semler covering five centuries under the title *Centuriae magdeburgenses* appeared in 6 vols. (Nuremberg 1757-65). L. Osiander published an abridgment and continuation covering sixteen centuries as *Epitomes historiae ecclesiasticae*, 9 vols. (Tübingen 1592-1604), tr. into German by D. Förter (Frankfort 1597-1608). The centuriators had translated the first four *Centuries* into German, 2 vols. (Jena 1560-65; reprinted Hamburg 1855).

Consult: Schulte, J. W., *Beiträge zur Entstehungsgeschichte der Magdeburger Centurien* (Neisse 1877); Preger, W., *Matthias Flacius Illyricus und seine Zeit*, 2 vols. (Erlangen 1859-61) vol. ii, ch. viii; Baur, F. C., *Die Epochen der kirchlichen Geschichtschreibung* (Tübingen 1852) ch. ii; Janssen, J., *Geschichte des deutschen Volkes*, ed. by L. Pastor, vol. v (16th ed. Freiburg i. Br. 1902) p. 343-69; Fueter, E., *Geschichte der neueren Historiographie*, Handbuch der mittelalterlichen und neueren Geschichte (Munich 1911) p. 249-53; Jundt, A., *Les Centuries de Magdebourg* (Paris 1883); Schaumkell, E., *Beitrag zur Entstehungsgeschichte der Magdeburger Centurien* (Ludwigslust 1898).

MAGIC. The basic ideas that have everywhere underlain magic have been limited. The practise of setting a pattern for the desired event, most frequently by use of analogy, has been omnipresent. A man desires his child to grow, therefore he chews the sprouts of the salmon berry and spits it over the child's body that it may grow as rapidly as the salmon berry. He smears the dust of mussel shells on the child's temples that it may endure as long as mussel shells. A man ties the dried navel string of his baby boy and a woman that of her baby girl to their wrists while they are busy at highly trained occupations, so that the child will have the same proficiency in these techniques. Fish hawk eyes are rubbed over a sleeping baby's lids to give him the fish hawk's sight; and because the raven is supposed never to be sick, the raven's beak is laid by the child that it too may be free of illness. One desires the death of his enemy, therefore he stuffs a bit of the enemy's clothing down a dead snake's throat and ties it with the sinews of a corpse; he puts it in an exposed tree top and the venom of the snake and the contact with the corpse will bring about the death of the enemy.

Any analogy may be used to perform magic. Sometimes, as in Oceania, punning analogies may be employed. Often the analogies are so deeply felt and fundamental in the cultural outlook of the people that they correspond to philosophic conceptions, as in the cases where magic in agricultural practises is based on the analogy between human and plant fertility and sex is

conceived to be the mystic correlate of other natural processes. The techniques may be divided into large general categories, such as Frazer's classification under the headings of sympathetic (or homeopathic, or imitative) magic and contiguous magic. They all fall into the category commonly designated as false analogies; these have been the chief reliance of all magic.

The analogies may be carried out either verbally or by imitative actions and are often carried out by both. For instance, the Chukchi of Siberia to keep a dying person alive symbolically transform a little finger into the dying man and hold it tightly in the palm. They also use traditional forms of words to express the analogies of magic; a jealous woman describes her husband as a hungry bear and her rival as the carrion he happens upon and vomits with disgust. Against evil spirits they use a simile of an impregnable ball, and they likewise exploit many other comforting figures of speech. Innumerable rites and ceremonies in all parts of the world have been built up on similar pattern setting analogies.

Magic control may also be exerted by making oneself master of some secret source of power. Egyptian name magic was of this sort; when the magician had obtained the name his control was automatic. A similar idea in primitive magic is found among the Orokaiva of New Guinea, where magic, depended upon in every situation, is strictly owned. The acts and the formulae are common knowledge, but the knowledge of the specific that gives one the power to operate magically is closely guarded. The specifics are usually leaves; a leaf that wilts immediately upon plucking to quiet the waves of a storm at sea; a leaf that grows to tremendous size to put in the water in which newborn domestic pigs are bathed; and others, with no known interpretation by analogy, which are wrapped with a bit of hair from one's enemy or buried with the yams at planting. On islands off the New Guinea mainland, as in Dobu and the Trobriands, it is the form of words constituting the spell that is the secret and guarded source of power. Amulets also usually have traditionally accepted powers, which often do not depend upon conscious analogies.

Magic procedures may be heightened in some areas by concentration, or concentration may be used alone as magic without other techniques. The person who practises the magic orders the event in his mind, with the belief that it will

stage itself in reality in a like manner; the Indians of the north Pacific coast believe, for example, that by concentration they will be enabled to see quantities of dentalia and will thus come into possession of large numbers of these coveted objects.

Magic is essentially mechanistic; it is a manipulation of the external world by techniques and formulae that operate automatically. Frazer names it therefore the science of primitive man. Both magic and science are technologies, capable of being summed up in formulae and rules of procedure. Magic is believed to be, as science is, effective in its own right, in so far as its formulae are letter perfect and its routines have been complied with to the last detail; it conceives the external world to be passive and amenable to human ends as soon as the relevant techniques have been mastered. Yet not magic but the routine procedures of felling trees, knotting fish nets, tempering clay for pottery, are primitive man's literal equivalents for the knowledge classified in modern times as science. For although both magic and science are bodies of techniques, they are techniques directed to the manipulation of two incompatible worlds. Science—and in primitive life the corresponding factual knowledge and command of procedure—is directed toward the manipulation of natural phenomena operating according to cause and effect. Magic is directed toward another world operated according to another set of sequences, toward the world of the supernatural.

It is this aspect of magic which Marett has stressed. From the point of view of the forces it makes use of, the magico-religious world is a fundamental entity whose business is with power, with supercausation not with natural sequences. Marett characterizes magic as religion's disreputable sister, a value judgment that has no more validity than Frazer's opposite one of the self-respecting magician as a master of his technique and of the world, over against the cringing supplicant that religion substituted. The problem is not that of judging between the two modes of approach to the supernatural but of the recognition of the fact that magic and religion, in both Marett's and Frazer's terminology, represent two possible extremes in every type of behavior that deals with the supernatural. Magic is technological and mechanistic, a compulsion of a passive universe to one's own ends; religion is animistic behavior and employs toward a personalized universe all the kinds of behavior that hold good in human relations. In

the behavior that centers around an object regarded as powerful there may be at the one extreme the magical amulet that functions automatically, that brings fortune by its mere possession and requires no honor nor humbling of one's self before it. At the opposite extreme there may be the powerful object of the type of the African fetish, which is treated essentially as if it were human; it is talked to, given presents, laid aside to recuperate when it is tired, and the crux of its use is the rapport between the operator and the sacred bundle. In techniques of inducing power by the spoken word there are likewise, on the one hand, the formulae and abracadabra that achieve their end automatically and, on the other, the prayers of the saint who puts himself into intimate relationship with his god. In witchcraft the jinn controlled may come automatically at the rubbing of Aladdin's lamp, or a sorcerer may maintain relationship with the devil that serves because of offerings, intercourse and prostration. Functionally therefore magic cannot be discussed without its complement, religion; they are always alternative techniques for inducing power and for achieving luck by means other than those of the natural cause and effect sequences. A people may have little magic and yet its conduct may be saturated with animistic techniques by which the same sort of supernatural sanction is achieved that in another region is achieved by magical practices. Both the animistic and magical techniques, however, have in common the fact that they rely upon wish fulfilments rather than upon mundane labor in order to attain their ends.

The mental confusion which gives rise to magic is different from that in which animistic beliefs have flourished. The latter result from a lack of distinction between the animate and the inanimate world and a consequent carrying over of human relations into man's dealings with the non-human. Magic, on the other hand, in all its branches is the consequence of a blindness to the essential disparateness of techniques that can be used in dealing with the various aspects of the natural world. It teaches, for example, that a treatment of the sword which has caused the wound will cure the wound, or that milk can be made to sour properly by treating the sacred cowbell. The fallacy involved is the ignoring of the fact that every end in nature has its own techniques by which it can be achieved and the assumption of a mystic sympathy in the external universe by which techniques applied at one point are efficacious at another point.

Progress in control of the universe has always been furthered by giving up pantheistic procedures and limiting techniques strictly to specific ends.

The confusion of thought involved in magic has been emphasized by Lévy-Bruhl as the essential fact in the working of the primitive mind, which he has designated as prelogical in contrast with the reasoning processes of modern man. He concludes from primitive practises in regard to birth and death, omens, dreams, divination, tabu, warfare and curing that primitives do not make logical distinctions. More categorically he contends that in totemism the primitive man does not know himself from the eponymous animal and in relation to the dead he does not know the ghost from the living. It can, however, be shown from the testimony of the most primitive magicians that they are quite able to make these distinctions. They are merely acting upon a basic philosophical creed which, if it were explicitly phrased, would be similar to that of the mediaeval doctrine of the macrocosm and the microcosm which assumes the existence of a mystic sympathy pervading the universe, thus making facts observable or brought to pass in one field significant and operative also in another.

Magical ideas and procedures are plentiful in contemporary civilization. The secularization of modern life has proceeded at the expense of religion and its gods rather than at the expense of magic. Animism and the personalization of the external universe have been banned from sophisticated thinking and children are now induced to outgrow their tendencies in this direction as soon as possible. Comparable advance toward non-supernatural behavior has not been made, however, in the realm of magical procedures. Those who have shaken themselves loose from the trammels of religious tradition often swell the ranks of the various divinatory cults based on the fundamental assumptions of magic—a clientele of Wall Street investors depends upon the verdict of astrologers, and air pilots skilled in the latest triumphs of mechanical science guide their acts by signs. There are innumerable more subtle beliefs in modern civilization that are essentially magical; those that are partially discarded are easier to isolate than those that are still accepted. The traditional American scheme of education is distinctly magical; it does not attempt to draw up a program of what the child will need as an adult and direct its attention to the specific necessary techniques.

Its method can be justified only by faith in a magical oneness in the intellectual world; education is regarded as power in the non-naturalistic sense. Modern society is still operating magically with most of the difficult problems that have to do with sex; that is, it does not recognize that there are adjustments and desirable ends in the field of sex which should be achieved apart from all dogmas of revealed religion or traditional morality. Few countries have as yet effectively acted upon the belief that good results in the control of industrial problems or international trade follow only from intelligent and specific procedures accurately adjusted to specific problems. The most characteristic magic of present western civilization is that which centers around property; the violent sense of loss that is experienced by the typical modern in the loss of a sum of money, quite irrespective of whether he and his family will be housed and clothed and fed, is as much a case of magical identification of the ego with externals as any of Lévy-Bruhl's examples of prelogical mentality.

Magic, being essentially only a supernaturalistic rule of thumb procedure, may be either traditionally developed or almost neglected in any field of culture. The contrast between American Indian cultures and those of western Melanesia in this respect is very great. The magic practises of the Kwakiutl are on a level with modern superstitions; they give good luck and are not neglected, but they exist quite apart from the main concerns of the culture. A chief seeking to consolidate his prestige engages in many pertinent activities; he may incidentally employ the services of a proprietor of magic techniques, but his activities are not directed to any great extent by the magic that may be used, nor is it essential that he employ magic at all. The religious practitioner, the shaman, operates not by virtue of magic techniques but because of his rapport with a guardian spirit to which he has not only a personal right through a validating experience but also an inherited right as a member of his family group.

On the other hand, on the island of Dobu, as Fortune has shown, magic practises cover every phase of life and are considered indispensable. There routine procedures are believed to be inadequate in all human activities, and the acquisition of magic is therefore the foremost concern of every ambitious man. It is categorically denied that gardens, the source of the food supply, can grow without magic, despite the fact that the gardens of white settlers have grown

for two generations. The great care given to the gardens is a magical routine to keep a man's yams in his own garden and to lure away as many of his neighbor's yams as his magic can accomplish. Every man's gains are regarded as another man's losses, and magic is the chief reliance in every individual's endeavor to succeed at the cost of his neighbor. A man's harvest from his garden is therefore evidence of his magical prowess and as such is suspect. Harvest is the occasion of most carefully preserved privacy; no one outside the immediate family is allowed to see a family's magically acquired gains. Sex intercourse is likewise regarded as the result of successful magic that gives one power over another man's woman, a conception which is widespread. The asocial nature of Dobuan magic is strikingly illustrated in the use of disease bearing spells in the validation of the ownership of betel nut, coconut palm and other trees. Magic is used also for rain making, for success in economic exchange on the *kula* and in legal actions of all kinds and for causing illness and death to one's opponents. Only in reference to pregnancy do the Dobuans recognize naturalistic causation; they understand it to come about naturally as a result of impregnation. The neighboring Trobrianders have prevented such an anomaly in the general theory of magic; they deny biological paternity and foster a belief which would have brought about a complete consistency in magical world outlook were it found in Dobu. Magic therefore according to the constellation of beliefs into which it enters may be, as in Dobu, a primary concern in social situations and the indispensable guaranty of success or it may be an unimportant adjunct to achievement.

It is not helpful to make clean cut classifications of black and white magic except in cases where the local culture has elaborated a dualism on this basis. The dualism is always possible and has sometimes been made among primitive peoples, but usually magic is not definitely committed either to good or to bad but is used for either as occasion arises. There is no way, for example, to distinguish good magic from the black art in Dobu, where the use of magic for gardens is regarded as achieving yams as spoils and the cures for disease carry with them inalienably the spells that cause it.

The province of magic cannot be regarded as limited to any one field of human behavior. In support of the hypothesis that magic practise is confined to dangerous activities not amenable to matter of fact control Malinowski instances the

Melanesians' application of magic to seafaring in canoes, to weather techniques and to pregnancy control. Many other examples could be given of the use of magic in times of peril. On the other hand, a list of occasions in which magic is used without danger being present could also be compiled. One of the characteristic magic practises of Hawaii, for example, was the supernatural consecration of the home, a rite in which the birth of a child was taken as an analogy, a bit of thatch being left free to be cut as the navel cord at the ritual housewarming. The magical procedure in the Toda dairy does not mean that the preparation of sour milk products is more precarious there than it is in other cattle regions where dairying is quite matter of fact, as among the Yakut. Similarly, if danger were the soil of magic one would expect a correlation of magical agricultural procedures with environments difficult for or unsuited to the growing of plants; on the contrary, however, such magic is most luxuriantly developed in the tropical island region of the Papuans, and agriculture was probably never carried on under less hazardous conditions. The contention of Hubert and Mauss that magic is the proscribed use of supernatural power, the illicit over against the accepted, is also an interpretation based on very local conditions and is inadequate in the light of what is at present known of the nature of magic in many primitive regions. On the contrary, it has become evident that the province of magic in human societies is as wide as human desires.

Magic has often been interpreted as a salutary influence in human development. Malinowski has held that magic serves as a remedy for specific maladjustments and mental conflicts in that it "prescribes the adequate idea, standardizes the valuable emotional tone and establishes a line of conduct which carries man over the dangerous moment . . . it supplies most of the co-ordinating and driving forces of labour, it develops the qualities of forethought, of order, of steadiness and punctuality, which are essential to all successful enterprise." Recently Kempf has still further elaborated the argument by holding that magic beliefs "are psycho-therapeutic efforts to make easier the stresses of physiological functioning in a social environment" and that "man grew his cultural ways and beliefs [in magic] in order to control these [physiological] functions, just as the pains of hunger pressed him to hoard food." Any group may use magic, as it may use any sanction, to build up socially desirable activities; and the people

Malinowski is describing, the Trobriands, with their pregnancy magic and their magical treatment of economic exchange in courtship terms, have done so in a decided manner. But a wider survey of the subject merely emphasizes the fact that in such a culture as that of the Trobriands social drives in the use of magic have become stronger than asocial ones. The fact that some societies have used magic for beneficent social purposes must be regarded not as revealing the primary role of magic but as an example of the way in which these societies have been able to direct cultural traits to their special purposes.

Magic has also been held to be a valuable human support as an effective emotional release; it is argued that it has prevented dangerous repressions and made for the health of the social body. This emotional release is evident, for example, in the Chukchi formulae and in the Dobuan realistic imitations of death which accompany the use of a disease charm. No actual killing of the enemy could be so satisfactory in details of vindictiveness as the pre-enactment that is staged in the interests of magic by the Algonquian medicine man. These emotionally satisfying compensations are, however, less common over the world than one would suppose a priori. The techniques of magic are more devious. The emotional satisfaction is by no means direct and vehement; it seems most often swamped in a meticulous observance of petty rules. For the most part, directly because of its character as a mechanical control, magic is cold, technical and non-emotional, a rule of thumb procedure, and it is difficult to regard it as a satisfactory compensatory emotional release.

Freud has emphasized the parallel between the mechanisms of magic and those of obsessional neuroses; both are explained in terms of system formations by which fundamental displacements are achieved that supersede reality for the persons concerned and involve "motor hallucinations" and even "a fundamental renunciation of the satisfaction of inherent instincts." The role of wish fulfilment must be freely admitted; it is a factor not only in the development of magic but in all cultural traits. The world man actually lives in—in the sense of his inescapable necessities and the inevitable conditions of life—always bulks very small in relation to the world he makes for himself. Magic is used to build up these worlds and to give security within them. Nevertheless, magic is only, in Tylor's terms, an occult science and a strong development of occultism may indicate extreme inse-

curity as often as it indicates security. The yam magic does not give agricultural security in Dobu; on the contrary, it emphasizes a danger spot in the culture and far from minimizing this stress in a community in which food is scarce it institutionalizes it. Security in agriculture seems to prevail under such conditions as exist in the Trobriands, where magic has fastened itself upon other objectives of life and where agriculture is a naturalistic occupation in comparison with its practise in Dobu. Magic potency ascribed to menstruating women or to the dead has not generally inculcated social security in relation to these portents; it has rather indicated the situations which a culture regards as social hazards. The analogy with neurotic behavior is striking; whether or not a culture has chosen to regard women or persons recently dead as supernaturally dangerous, the usual course has been to erect in a neurotic manner an associated edifice of ceremonial by means of which displacement is achieved and the object of dread pushed off the scene or brought back in some more acceptable guise.

The role of magic in institutionalizing fear reactions is especially marked in witchcraft. This is clearest in situations where sorcery as a body of known and recognized magical procedures does not exist but is nevertheless an inescapable fear and a common accusation. The Salem witch trials were evidently of this type, as were the contemporary English anti-witch demonstrations. Primitive cultures, such as that of the Pueblo Indians of the southwestern United States, use witchcraft in analogous ways; the fear of sorcery is a motivation in every situation in life, but no spells or rites actually practised by intending sorcerers have been uncovered, and it seems probable that they do not exist. Even in regions where magic as an objectification of panic is balanced by its use as a control over the external world, the social control it exercises is characteristically through the institutionalizing of a fear neurosis. In Australia, for example, there are traditional techniques associated with the art of "pointing the bone," but its social significance is not so much in the fact that a few old men make use of the practise to inflict punishment as in the fact that it is the social setting for the neurosis of a conviction of death that can rarely be dislodged; entire villages have died in the strength of this conviction.

Thus the contention that magic has had a salutary role in human history must be balanced by facts which present it in a different light,

Far from being an asset it has often been a heavy liability, and its phenomena are analogous to the delusions of grandeur and fear constructs of the neurotic. Its procedures are in psychiatric terminology mechanisms of displacement, and they tend in both primitive and modern societies to substitute unreal achievement for real.

RUTH BENEDICT

See: CULTURE; ANIMISM; FETISHISM; DIABOLISM; DIVINATION; MYSTERIES; FESTIVALS; FERTILITY RITES; CEREMONY; RITUAL; RELIGION; MEDICINE; SCIENCE; METHOD; SCIENTIFIC; SUPERSTITION; MYTH; PSYCHOANALYSIS.

Consult: Goldenweiser, Alexander A., *Early Civilization* (New York 1922) chs. x-xi; Frazer, J. G., *The Golden Bough*, 12 vols. (3rd ed. London 1907-15); Malinowski, B., *Argonauts of the Western Pacific* (London 1922) ch. xvii, and "Magic, Science, and Religion" in *Science, Religion and Reality*, ed. by Joseph Needham (London 1925) p. 19-84; Fortune, R. F., *Sorcerers of Dobu* (London 1931) ch. iii; Hubert, Henri, and Mauss, Marcel, "L'origine des pouvoirs magiques" in *Mélanges d'histoire des religions* (Paris 1909) p. 131-87, and "Esquisse d'une théorie générale de la magie" in *Armée sociologique*, vol. vii (1902-03) 1-146; Marett, R. R., *The Threshold of Religion* (2nd ed. New York 1914); Lévy-Bruhl, L., *Les fonctions mentales dans les sociétés inférieures* (Paris 1910), tr. by L. A. Clare as *How Natives Think* (New York 1926); Kempf, E. J., "The Probable Origin of Man's Belief in Sympathetic Magic and Taboo" in *Medical Journal and Record*, vol. cxxxiii (1931) 22-27, 59-62, 118-20; Freud, Sigmund, *Totem and Tabu* (3rd ed. Vienna 1922), tr. by A. A. Brill (New York 1918); Tylor, E. B., *Primitive Culture*, 2 vols. (7th ed. New York 1924) vol. i, ch. iv; Lang, Andrew, *Magic and Religion* (London 1901); Lowie, R. H., *Primitive Religion* (New York 1924); Reinach, S., *Cultes, mythes et religions*, 5 vols. (Paris 1905-23), partially translated by E. Frost (London 1912); Rivers, W. H. R., *Medicine, Magic, and Religion* (London 1929); Beth, Karl, *Religion und Magie* (2nd ed. Leipsic 1927); Thurnwald, Richard, "Zauber" in *Handbuch der vergleichenden Psychologie*, ed. by Gustav Kafka, 3 vols. (Munich 1922) vol. i, pt. ii, p. 291-95; Wundt, Wilhelm, *Völkerpsychologie*, 10 vols. (Leipsic 1911-20) vol. iv; Sumner, W. G., and Keller, A. G., *The Science of Society*, 4 vols. (New Haven 1927), especially vol. ii, chs. xxix and xxxi; Löhr, Max, "Magie" in *Reallexikon der Vorgeschichte*, 15 vols. (Berlin 1924-32) vol. vii, p. 339-43; Danzel, T. W., *Magie und Geheimwissenschaft in ihrer Bedeutung für Kultur und Kulturgeschichte* (Stuttgart 1924); Jevons, F. B., "Magic and Religion" in *Folk-lore*, vol. xxviii (1917) 259-78; Howitt, A. W., *Native Tribes of South-east Australia* (London 1904) ch. vii; Bogoras, Waldemar, *The Chukchee*, Jesup North Pacific Expedition, ed. by Franz Boas, vol. vii, American Museum of Natural History, Memoir, no. 11 (Leiden 1904-09) chs. xiii and xvi; Williams, F. E., *Orokaia Magic* (London 1928); Rivers, W. H. R., *The Todas* (London 1906); Steinen, Karl von den, *Unter den Naturvölkern Zentral-Brasiliens* (Berlin 1894) ch. xiii; Haddon, A. C., "Magic" in Cambridge Anthropological Expedition

to Torres Straits, *Reports*, 6 vols. (Cambridge, Eng. 1901-08) vol. vi, p. 192-240; Murray, M. A., *The Witch-cult in Western Europe* (Oxford 1921); Thomdike, Lynn, *The Place of Magic in the Intellectual History of Europe*, Columbia University, Studies in History, Economics and Public Law, vol. xxiv, no. 1 (New York 1905).

MAGNA CARTA, perhaps the most famous and influential public document in the history of English speaking peoples, had an origin which little indicated its future. King John (1199-1216) had made his rule infamous long before there was thought of forcing him to make a formal grant of liberties. He had broken every obligation which bound an overlord to his vassals in the political feudalism of that time, especially oppressive being his irregular and excessive levies of scutage and aids and his abuse of the feudal incidents of relief, wardship and marriage. His quarrel with the pope over the appointment of the archbishop of Canterbury led to wholesale reprisals against the church in England and alienated that body. The murder of his nephew Arthur, the circumstances of his divorce and second marriage, his treatment of hostages, use of mercenaries and grasping interference with trade made all classes his enemies. It surprises one that this was borne for some fourteen years, but both a leader and an idea had been lacking. The leader appeared in the new archbishop Stephen Langton and the idea through Langton's discovery of Henry I's coronation charter (1100), apparently long forgotten. It seemed apt for the purpose, for it had promised correction of William II's abuses—much like some of John's.

In the period following the Conquest circumstances had led the Norman kings and then Henry II to make more or less formal oral or written promises. Although they were strong kings, it was becoming customary for them to bind themselves to observe sundry parts of the unwritten law. Henry I's charter was the most notable instance; and this was the tradition which Stephen Langton revived. The coalition which forced the charter from John was broader than the feudal groups which had faced earlier kings, since now both the church and London were concerned; and the king could not depend on the middle and lower classes as had his predecessors. All elements feared or hated him more than they did one another. To that extent there was a national rising. The church was in fact first spoken of as the "English church" in John's reign; it was twice so called in the charter,

and it is natural to see in this some reflection of its independent attitude toward the pope and identification with English interests. Moreover the baronage was assuming to speak for the nation; their counsel was the "common counsel of the realm," a phrase used then with rapidly increasing frequency. Through long periods of peace and under masterful sovereigns the nobles had become more landlords than warriors and by both royal command and natural association were being drawn into all sorts of public service. Thus in the army which met John at Runnymede there was a great deal of the feudal uprising to vindicate feudal custom, something of a crusading spirit (their leader was called "marshal of the army of God and of holy church") to guard spiritual rights and some notion of upholding in the "community of the realm" such other liberties as had attained recognized expression.

In the spring of 1215 there had been much experimenting in drawing up lists of liberties and finally on June 15 the triumphant barons presented and John was forced to concede a schedule of forty-eight articles together with a "form of security." In the following days amendments were made and wording was worked out, and on June 19 the scribes completed engrossing the many "originals" distributed throughout England to places of safe deposit. Four of these are still extant, three perfectly legible. Two are in the British Museum and there is one in each of the cathedrals, Lincoln and Salisbury.

The earlier provisions of the Great Charter relate largely to feudal abuses, and the arrangement seems suggested by Henry's charter; but there had been a vast governmental development in the interval and many new circumstances which perforce differentiated John's breaches of law and custom from those of William II and made his charter a new and original document. Moreover it was forced from him, not voluntarily granted—one reason why it was more carefully worded and much longer. The barons did not take this occasion to annul the institutional advances of previous kings, especially Henry II. With but one or two exceptions, where they felt their financial interests invaded, they sought not to destroy but to restore and as far as possible to control. They wished to keep the king from transforming feudal payments into taxes; they laid down the principle that he could not attack freemen or seize their property except on the basis of a court judgment and in the light of a half century of experience regulated the opera-

tion of some of Henry II's legal innovations; they limited the powers of sheriffs and coroners; they decreed the ancient liberties to London and other municipalities, renewing the Assize of Weights and Measures and sundry rules touching merchants; they regulated and limited royal amercements, mitigated the forest laws and included emergency measures made necessary by the acts of an incorrigible king. At the end they outlined a clumsy, aristocratic machinery for dealing with John if he should break the charter and as a measure of last resort authorized all in the realm to rise against the king "until redress has been obtained." All this was put in the mouth of the king, and the granting words appear to have been borrowed from land grant charters. There was little thought of the distant future; just enough law was stated to meet the present emergency, the charter being essentially a treaty: the king on his side to keep these promises and barons, clergy and people to continue to regard him as king. The barons and others having a direct hand in the matter acted selfishly, to be sure, but it was high grade, discriminating, constructive selfishness. They made a great document, one that had in it the seeds of a growing greatness.

The treaty did not hold, for John did not intend to keep it. In three months he had obtained a papal release from his oath, it being impossible for Innocent III, who had become John's feudal overlord, to understand the special circumstances which united clergy and nobles in England. The country was plunged into civil war; the council of twenty-five barons to enforce the charter had no chance to function, and John died while the fight was still even. To gain the throne for the boy king Henry III the charter was voluntarily reissued in 1216, the papal legate with the new pope's consent acting with the group of conservative barons who favored John's heir. But sundry provisions were omitted or suspended, and in 1217 a more permanent text was issued with the forest articles in a separate charter. The parent document was soon called the Great Charter in contrast to the smaller forest charter; but ere long it was thought of as great in import rather than in size. It had got by chance a fortunate name. In 1225 there was a third reissue, and from then the texts remained unchanged. These texts were the ones administered in the courts and embodied in the Statute Rolls. The nature of Henry III's rule and sundry episodes in later reigns led to many solemn reissues. Indeed in the fourteenth century it became a

habit for Parliament to demand confirmations. There were pomp and ceremonial, the church pronouncing the greater excommunication upon infringers and the principle appearing that acts contravening the charters were void. Magna Carta had entered on a career of glory and contributed to the dogma of the inviolability of law—law which even kings must keep. Some articles were in wording notably expansible and adaptable and in an uncritical age served well the changing times and problems. It proved a practical document routinely administered in the courts through the thirteenth and fourteenth centuries. Occasionally groups of added articles were issued when it was confirmed, and with it were tenuously associated certain statutes which dealt with the more general principles of public law. After a period of comparative eclipse under Yorkists and Tudors it entered powerfully into the seventeenth century struggle against the Stuart kings and was construed to furnish authority for principles finally embodied in the Bill of Rights. At the same time in the American colonies it was influencing the "fundamentals," "bodies of liberties" and charters which determined the trend of the new governments and was becoming a generic term for documents fundamental to or protective of liberties. It was much cited at the time of the revolution and in connection with the constitution and its adoption. Today we study its history; yesterday it was our political Bible. If it became something of a myth, few would question that the myth has been beneficent—and still is.

ALBERT BEEBE WHITE

See: CIVIL LIBERTIES; BILLS OF RIGHTS.

Consult: McKechnie, W. S., *Magna Carta* (2nd ed. Glasgow 1913); Royal Historical Society, *Magna Carta Commemoration Essays* (London 1917); Adams, G. B., *The Origin of the English Constitution* (New Haven 1912) chs. v-vi; *Chartes des libertés anglaises (1100-1305)* (Paris 1892), with introduction and notes by Charles Bémont; Thompson, Faith, *The First Century of Magna Carta*, University of Minnesota, Research Publications (Minneapolis 1925).

MAHAFFY, SIR JOHN PENTLAND (1839-1919), Irish historian. Mahaffy was from 1864 fellow, from 1869 professor of ancient history and from 1914 provost of Trinity College, Dublin. His earliest writings were devoted to philosophy, his latest to the antiquities of his college, his central and major works to the interpretation of Greek history. Interpretation was to him the main thing. For the laborious collection and establishing of facts he had or seemed to have

little patience. Hence his contributions to knowledge were usually presented as impressions or intuitions—matters to be illustrated by examples, in the choice of which he was singularly felicitous, and by analogies, often far fetched. He was apt to be most dogmatic when he was least orthodox; and he was not held back by nice calculations of scholarly self-interest from challenging accepted opinions. He found the Athenians of the great age shockingly cruel and deficient in refinement; he dared to prefer Euripides to Sophocles as a dramatist; he stressed the historical significance of the Hellenistic age. His most valuable productions, his studies in Greek social and intellectual history and his histories of Macedonian Egypt, were for a long time the only works of their kind in English. His treatment was discursive. He had a keen eye for the picturesque and piquant. His criterion of relevance was modern interest. Hence persons, situations and incidents were strongly featured, while the silently moving forces which condition vast social changes were unduly neglected. Mahaffy was a pioneer in his revolt against dry antiquarianism and his rejection of the narrow limits set to Greek experience by ancient and modern classicism. He was among the first British scholars to interest himself in papyrology, but "he was not cut out by nature to be an editor of papyri" and was speedily outstripped by others. Like all pioneer work his is enduring only as such. He was greater as a teacher and personality than as a scientific scholar.

WILLIAM SCOTT FERGUSON

Important works: *Social Life in Greece from Homer to Menander* (London 1874, 7th ed. 1890); *Greek Life and Thought from the Age of Alexander to the Roman Conquest* (London 1887, 2nd ed. 1896); *The Greek World under Roman Sway, from Polybius to Plutarch* (London 1890; reissued as *The Silver Age of the Greek World*, Chicago 1906); *The Empire of the Ptolemies* (London 1895); *A History of Egypt under the Ptolemaic Dynasty* (London 1899); *The Flinders Petrie Papyri*, Royal Irish Academy, Cunningham Memoirs, vols. viii, ix, xi, 3 vols. (Dublin 1891-1905), vol. iii being ed. in collaboration with J. G. Smyly; *A History of Classical Greek Literature*, 2 vols. (London 1880, 3rd ed. 1890-91).

Consult: Hunt, A. S., in *Aegyptus*, vol. i (1920) 217-21; *Hermathena*, vol. xix (1922) v-viii.

MAHAN, ALFRED THAYER (1840-1914), American historian. The son of a professor in the United States Military Academy at West Point, Mahan was an officer in the United States navy from 1856 to 1896 and wrote his major

books while in active service. He wrote brilliantly on technical naval history, constantly drawing political conclusions from his studies. Late in life he supported his arguments for a big American navy with a philosophy of war not dissimilar to that of Bernhardt in Germany. He was a devout Episcopalian and an active leader in foreign missionary endeavor.

His monumental work, *The Influence of Sea Power upon History, 1660-1783* (Boston 1890), and his other writings were the first to go beyond the traditional descriptions of individual naval campaigns or battles interesting only to naval specialists and to examine the political importance of naval strategy and sea power in a manner suitable for lay readers. Although great naval battles had always aroused popular attention, the importance of the slow, cumulative effects of the distant blockade had generally been overlooked by all but actual sufferers from it. As a consequence military invasions and occupations, whose incidents could be observed at close range by many persons, were given undue recognition. Mahan was the first to explain for the lay public the genius of Nelson and other naval commanders who successfully used the strategy of the blockade. In his *The Influence of Sea Power on the French Revolution and Empire, 1793-1812* (2 vols., Boston 1892) he showed how British control of trade routes and British sea power in general frustrated Napoleon's overwhelming strength on land and smashed his plan of an eastern campaign and how all the resounding victories of the French on the European mainland were nullified by the cutting off of sea borne supplies and by the stoppage of ocean commerce.

Mahan's writings were read by statesmen and publicists in all countries and were responsible for a revision of the notions of the governing and politically minded classes on naval questions. They were influential in France and England and helped win public support in Germany for the kaiser's fight for naval appropriations against the opposition of the military party. It is doubtful if the World War would have found America with the third most important fleet in the world had Mahan never set forth his lessons in naval strategy, which also influenced the American demand for naval parity with the British Empire after the war. Although some recent writers in the same field argue that Mahan overrated the value of sea power, his estimate did serve to correct earlier misconceptions; and as an important basis for the ideology of naval

expansion his work has been of great significance for recent world politics.

J. M. KENWORTHY

Consult: Kirkham, George K., and Baskerville, T. H., *The Books and Articles of Rear Admiral A. T. Mahan* (New York 1929); Taylor, C. C., *The Life of Admiral Mahan* (London 1920); "Biographisches über Mahan" in *Marine-Rundschau*, vol. xix (1908) 1130-46, with a bibliography; Moireau, Auguste, "La maîtrise de la mer: les théories du Capitaine Mahan" in *Revue des deux mondes*, 5th ser., vol. xi (1902) 681-708; Beard, Charles A., *The Navy: Defence or Portent* (New York 1932) p. 18-21.

MAHMUD II, SULTAN (1784-1839), Turkish statesman. Mahmud came to the throne in 1808 and soon afterward began his program of consolidating the empire and of introducing reforms along western lines. His plans were, however, consistently hindered by the intrigues of the European powers, particularly Russia, by the attempts of Ali Pasha of Janina and Mehemet Ali to carve out independent principalities, by war and by the frequent rebellions of subject peoples.

Convinced of the need of westernizing Turkey, he attempted to wipe out existing abuses and to develop western institutions and customs. Although his measures enjoyed only mediocre success, they prepared the ground and pointed the way for the fundamental reorganization of the country. In Anatolia he deposed the *Dere-beys*, the hereditary local chiefs; in Mesopotamia he reestablished national authority and in Arabia checked the growing power of the Wahhabites. In various ways he succeeded in curbing feudal tendencies.

A new army after the western model was formed and was intended to include the Janizaries, who instigated a serious rebellion as a protest; the annihilation of the Janizaries in 1826, one of Mahmud's chief political achievements, created a sensation and was enthusiastically praised as an "auspicious event" by the reform party. Prussian military instructors were employed and young officers were sent to western European military schools. Nevertheless, the complete transformation of the army was too great a feat to be accomplished in Mahmud's lifetime and for the moment the results were injurious.

Under Mahmud attempts were also made at administrative reform. The central government was rendered simpler and more efficient; a ministerial cabinet similar in type to the European was formed and relations with foreign powers were strengthened by means of perma-

nent embassies. European civilization was zealously cultivated: Mahmud maintained an informal court in Istanbul, introduced European customs and fashions and broke precedent by traveling in the provinces of his empire. He sponsored the publication of two official newspapers; the French *Moniteur ottoman* established in 1831 and the Turkish *Takvimi-vekayih* (Calendar of events) in 1832. Mahmud's subjects were generally unenthusiastic about his innovations; the increased tariff, the monopolization of the sale of coffee and finally Mahmud's monopoly of Asiatic goods caused risings which were put down with bloodshed.

FRANZ BABINGER

Consult: Sax, Karl von, *Geschichte des Machtverfalls der Türkei bis Ende des 19. Jahrhunderts und die Phasen der "orientalischen Frage" bis auf die Gegenwart* (new ed. Vienna 1913) p. 178-274; Iorga, Nicolae, *Geschichte des Osmanischen Reiches nach den Quellen dargestellt*, *Geschichte der europäischen Staaten*, 5 vols. (Gotha 1908-13) vol. v, bk. ii.

MAIL ORDER HOUSES. *See* RETAIL TRADE.

MAIMONIDES, MOSES (in Hebrew Mose ben Maimon) (1135-1204), mediaeval Jewish scholar and philosopher. Maimonides, the most outstanding Jewish thinker of the Middle Ages, was born in Cordova, Spain. When this city was conquered by the Almohades in 1148, his family was forced by religious persecution to emigrate; and after long and difficult years of wandering the future philosopher found a new homeland in Fostat, Egypt, where he developed an extensive practise as a physician. In his later years he served as religious head of the Egyptian Jews.

Maimonides had at his command the entire range of mediaeval knowledge and was productively active in a number of fields. Of his medical writings those known as the Aphorisms of Moses and the Treatise on Poisons (translated into French by M. Rabbinowicz as *Traité des poisons*, Paris 1865; and into German by M. Steinschneider, Berlin 1873) and a work on hygiene composed for a son of Saladin enjoyed great prestige in the Middle Ages. But far overshadowing his medical work are his Talmudic and philosophical accomplishments. His works on the Talmud introduced into that field the systematic methods of the science of his day. This systematic tendency may be observed even in his early commentary on the Mishna (written in Arabic, finished in 1168), where he deduces the principles on which the precepts of the Mishna are based. The same trend is present to

a much greater degree in his *Mishneh torah* (Recapitulation of the law), also known as *Yad ha-chazakah*. This treatise, written in Hebrew and completed in 1180, is a codification of the entire Jewish religious law, including the juristic, ritual and ceremonial phases, prefaced with a short exposition of the religious and ethical foundations of Judaism. It brings together with exhaustive scholarship all the material scattered in the tortuous discussions of the Talmud and arranges it with the most admirable clarity and comprehension; even today it constitutes the most helpful guide for the study of the Jewish religious law. Materially Maimonides' decisions on Talmudic problems attained the force of authority, particularly in Spain and the Orient; formally his compilation became the guide and starting point for all later codifications.

His chief philosophical work, the *Dalalat al-chairin* (Guide for the perplexed; in Hebrew *More nebuchim*), completed about 1190 (Arabic with French translation published by S. Munk, 3 vols., Paris 1856-66; English translation by M. Friedländer, 3 vols., London 1889), seeks to reconcile Judaism with philosophical truth (identical for Maimonides with the doctrine of Aristotle in the neo-Platonic conception of his Islamic commentators) or rather to demonstrate that they are in essence one. Biblical revelation includes all philosophical truth within itself, and therefore to possess true religion one must comprehend it in its deeper philosophical substance. In order to bring about the synthesis of religion and philosophy it was necessary for Maimonides to remold the Aristotelian system so as to include in it the Biblical concept of a supermundane creative God. With penetrating criticism he thus refutes the Aristotelian argument for the eternity of the world and the neo-Platonic argument for an eternal emanation of the world from God, in order to win a place for the belief in creation. On the other hand, the synthesis demands a thorough rationalization of the Biblical religion. The chief moments of this rationalization are, on the one hand, the philosophical sublimation of the concept of God so as to exclude not only all real anthropomorphisms but also all positive knowledge of God's nature; and, on the other, an intellectualistic concept of the nature and vocation of man, according to which theoretical knowledge is man's ultimate goal and is the means of his coming into relationship with God, immortality being accorded only to the spirit which perfects

itself in theory. The various specific teachings of the Bible are similarly transformed philosophically. Maimonides admits, although with reservations, the "natural" explanation of prophecy developed in Islamic philosophy and puts many of the Biblical miracle narratives under the head of experiences of prophetic fantasy; he also interprets the Biblical laws of worship and ritual only as a means toward the ultimate rational purpose of revelation. For those commandments which permit of no direct rational explanation he applies the historical method of interpretation, regarding them as preventives against pagan ideas and modes of worship.

While these tendencies are to be found also in the earlier Jewish philosophy of religion, Maimonides carried them out with incomparable speculative criticism; and his work became the basis of the entire later mediaeval Jewish philosophy. For three hundred years he was the center of philosophical discussions; although many thinkers exceeded him in rationalistic radicalism, others attacked him precisely for his rationalism. His influence was not merely limited to the philosophy of the schools; his philosophical interpretation of religion became the religion of the educated classes, the basis of a religious enlightenment which penetrated all branches of Jewish literature and which maintained its force despite lively attacks on the part of the strictly orthodox in the thirteenth century and the beginning of the fourteenth. Even in the modern period Spinoza was deeply influenced by Maimonides, and thinkers like Moses Mendelssohn, Salomon Maimon and Hermann Cohen learned to philosophize from him. In the culturally isolated ghettos of eastern Europe the figure of Maimonides long stood out as that of the arch-intellectual and formed the bridge between the Jewish tradition and the secular learning of the West.

Maimonides exerted also a strong influence in Christian philosophy. The great Christian Aristotelians Albertus Magnus and Thomas Aquinas followed him in the building of a theistic Aristotelianism; mystical philosophers like Meister Eckhart and Nicolas of Cusa attached themselves to his doctrine of God; in the Renaissance Jean Bodin professed his religious rationalism and even Leibniz refers to Maimonides for the founding of his religious optimism.

JULIUS GUTTMANN

Consult: Levy, Louis G., *Maimonide* (Paris 1911); *Moses ben Maimon, sein Leben, seine Werke und sein Einfluss*, ed. by W. Bacher and others, Gesellschaft

zur Förderung der Wissenschaft des Judenthums, Schriften, vol. xi, 2 vols. (Leipsic 1908-14); Yellin, D., and Abrahams, I., *Maimonides* (Philadelphia 1903); Weiss, I. H., *Dor dor vedorshov* (A history of the oral tradition), 5 vols. (4th-6th eds., Vilna 1904-11) vol. iv, ch. xxvii; Ginzberg, A., *Al parashath derachim* (Collected essays), 4 vols. (Odessa 1895-1913) vol. iv, p. 1-37; Joël, Manuel, *Die Religions-philosophie des Moses ben Maimon* (Breslau 1859).

MAINE, SIR HENRY JAMES SUMNER (1822-88), English legal historian and political theorist. After occupying the chair of civil law at Cambridge and attaining distinction as a scholar by his *Ancient Law* (1861) Maine served as legal member of the Viceroy's Council in India from 1862 to 1869, returning to England to teach jurisprudence at Oxford and further to explore legal history and theory in a series of books. His wide and subtle understanding of legal and institutional history was derived largely from his knowledge of India and of Roman law, both of which he regarded as indispensable to English juristic study—India as "the great repository of verifiable phenomena of ancient usage and ancient juridical thought" and Roman law as the link between ancient usage and modern legal thought. His works and point of view were enormously influential in English jurisprudence: they served to correct the rigid analytic emphasis of the Austinian school and introduced the historical and comparative methods. To Maine these methods were interwoven: the study of surviving laws and customs—especially those of the East, where, he felt, the western past still lived—could be used as an index of past historical forms. But his was not the superficial and schematic historical method concerned to establish a series of invariable stages of development. He held that there could be "no universal theory attempting to account for all social forms by supposing an evolution from within." His principal concern was with the origins of civilization; he used legal history as an instrument to this end because it furnished the most certain and most illuminating material.

Ancient Law (London 1861; new ed. with introduction by F. Pollock, London 1930; with introduction by C. K. Allen, London 1931), his greatest work, is a study of the earliest ideas of mankind as reflected in ancient law and as related to modern thought. Maine regarded Roman law as a body of tough and technical wisdom worked out by the great Roman jurists, out of which have come such essential modern legal concepts as contract and the will and of which the so-called natural rights of the modern world are

but vague restatements. In analyzing the conditions out of which Roman law arose and the course of its development Maine sought to discover how the crust of custom came to be broken and the combination of order and liberty favorable to civilization secured. Out of this study emerged three generalizations: that in the development of law the sequence is that of judgments, custom and statutes; that the agents of legal change are fictions, equity and legislation; that progressive societies show a development from status to contract. He had a clear grasp of the nature and importance of custom in the development of law and used it to pour ridicule on the insularity and crudities of the English common law teaching. While Maine put the generalization about the progress from status to contract more subtly than would be inferred from his critics, it did suffer from his mistake of taking his own age as final. He saw civilization as mysteriously dependent on freedom of contract: actually, as Maitland and Pound have shown, civilization is more dependent on contract being limited in its scope. Maine further developed his ideas in *Village Communities* (London 1871, 7th ed. 1895), *Lectures on the Early History of Institutions* (London 1875, 4th ed. 1890) and *Dissertations on Early Law and Custom* (London 1883, new ed. 1891), all of them comparative historical studies of the origin of institutions: in the first, basing himself largely on the work of German scholarship, principally that of von Maurer, he showed the analogy between the living institutions of India and those of Anglo-Saxon England; in the last two he worked the Irish Brehon Laws and the sacred legal code of the Hindus into his thesis.

Maine's effect on political thought was chiefly indirect, through his enormous influence on jurisprudence. His juristic ideas had political implications; his historical search for the conditions that had caused the differences between stationary and progressive societies called obviously for contemporary application. In his *Popular Government* (London 1885, 5th ed. 1897) he addressed himself deliberately to this problem as it affected democratic society. He believed that a multitude of ideas on government were, like the legal theories he had attacked, "a set of deductions from the assumption of a state of nature": he aimed to refute easy optimism about the future of democracy by examining its history and actual functioning. The result is a book that may be described as a caricature of *Ancient Law*. The preconceptions underlying both books are

the same: that civilization is unusual and must be defended against revolutionary and plausible theories as to the nature of man and his rights. But while in *Ancient Law* this sense of the precariousness of civilization had led Maine to study with technical knowledge and subtle insight the emergence of modern law out of primitive custom, it distorted in the later book his historical study of democracy. The error of mistaking an investigation into origins for a valid criticism of values, which lurks in all his books, is here fatal. The selected facts are a mere decoration for the central assumption that civilization is a technical skill held in trust for the many by the few, a hardly won entity which force created, habit perpetuates and legal skill protects and elaborates.

Maine's work has had considerable importance also for anthropology. *Ancient Law* contains the germs of modern anthropological methods. Even before Morgan, Maine drew the distinction between kinship, or tribal, organization and territorial, or political, organization. He conceived the patriarchal family to be the basic unit of primitive social organization—a view combated by Morgan, Bachofen, McLennan and Lubbock.

K. SMELLIE

Consult: Duff, M. E. Grant, *Sir Henry Maine* (London 1892); Smellie, K. B., "Sir Henry Maine" in *Economica*, vol. viii (1928) 64-94; Allen, C. K., Introduction to his edition of *Ancient Law*, reprinted in *Legal Duties and Other Essays in Jurisprudence* (Oxford 1931) p. 139-55; Vinogradoff, P., "The Teaching of Maine" in *Collected Papers*, 2 vols. (Oxford 1928) vol. ii, ch. viii; Barker, E., *Political Thought in England from Herbert Spencer to the Present Day* (London 1915) p. 161-73; Pound, R., *Interpretations of Legal History* (New York 1923) ch. iii; Graham, W., *English Political Philosophy from Hobbes to Maine* (London 1899) p. 348-415; Tupper, C. L., "India and Sir Henry Maine" in *Journal of the Society of Arts*, vol. xli (1897-98) 390-405.

MAISTRE, COMTE JOSEPH MARIE DE (1753-1821), political theorist and social philosopher. In his general point of view de Maistre, the most cogent political theorist writing in French against the secularistic, anti-aristocratic and antimonarchical ideas of 1789, is distinguished from the émigrés by a quality of objectivity which enabled him to see the full significance of the revolution as the dawn of a new epoch. This may be explained in part by the fact that he was Savoyard rather than French by nationality and that as member of the senate of Savoy (1774-92) and later as Sardinian ambas-

sador to St. Petersburg (1803-17) he passed the years of upheaval remote from the actual scene. It was in St. Petersburg that he wrote both his *Essai sur le principe générateur des constitutions politiques* (Paris 1814, new ed. Lyons 1924; tr. into English, Boston 1847) and the famous disquisition on ecclesiastical politics, *Du pape* (2 vols., Lyons 1819; ed. by J. d'Ottange, 1 vol., Paris 1903). The *Essai* stated in the form of general principles and with greater incisiveness the basic ideas previously expressed in his *Considérations sur la France* (Neuchâtel 1796; new ed. by E. Vitte, Lyons 1924), in which he had fully expounded the Catholic traditionalistic position. His posthumously published *Les soirées de Saint-Petersbourg* (2 vols., Paris 1821; ed. by A. de La Valette-Montbrun, 1924) with its celebrated apologia for the executioner "as the corner stone of human society" presented a mystical philosophy of history but added nothing essentially new.

The keynote of de Maistre's argument was that political and social institutions, being logically and actually anterior to the individual, are not required to justify their relation to the individual before the bar of human reason. The Rousseauistic contract, interpreted either as an actual historical phenomenon or as merely a legal basis for society, was absurd precisely because the individual was inconceivable except within the framework of the social order. The existence of the social order itself must be explained as the result of a superindividual, that is, divine, decree; for even the man of genius, like the great lawgiver of antiquity, was endowed with real creative power only to the extent that he felt himself to be the instrument of a transcendent force. If man would avoid the error of the "trowel which mistook itself for the architect," he must recognize that the function of a constitution was confined to the formulation of relationships, the legality of which rested upon a preexistent sanction. The sole criteria admitted by de Maistre for evaluating a particular social or political institution were the length of time which it had endured and the will of providence. On some occasions he equated the two criteria and on others he assigned precedence to time, "the prime minister of God on earth." But in either case he completely excluded the welfare of the individual, who represented in his philosophy a mere moment in the series of generations. The Catholic side of de Maistre's traditionalism appeared in full relief when he correlated the power of a constitution to endure

with the extent to which it was permeated by religious elements. After such an analysis de Maistre was logically prepared to condemn all written constitutions and in particular modern parliamentarism. Although he approved the retention of certain traditional associations, such as estates and guilds, which might act as intermediaries between ruler and ruled and even exercise rigidly circumscribed powers, he countenanced no real check upon the sovereign except the papacy, to which in the event of conflict the people might as a last resort appeal. The pope as representative of God on earth was absolute sovereign, which for de Maistre implied infallibility and complete freedom from conciliar control. Infallibility attached also to the sovereignty of the temporal ruler, but in his case it was only "presumed," while that of the pope was warranted by God.

Because of its admixture of the dogmatic with the empirical the influence of de Maistre's political theory has from the first been restricted. A doctrine which treated the Reformation as merely a different aspect of the error which produced the revolution could naturally gain no footing in Protestant countries. In the Catholic countries it found adherents only in clerical circles, so that de Maistre became immediately marked as a political partisan. It is to be noted, however, that the arabesques of Catholic dogma may be removed without impairing the force of de Maistre's argument that both morally and historically society precedes the individual. This basic positivism, however disguised, explains the influence which the Catholic traditionalist exerted upon Comte through the socialist Saint-Simon and through Comte upon the sociologist Durkheim and the neoroyalists of the Action Française.

PETER RICHARD ROHDEN

Works: Oeuvres complètes, 14 vols. (new ed. Lyons 1884-86).

Consult: Cogordan, Georges, Joseph de Maistre (Paris 1894); Descostes, François, *Joseph de Maistre avant la Révolution*, 2 vols. (Paris 1893), and *Joseph de Maistre pendant la Révolution* (Tours 1895); Rohden, P. R., *Joseph de Maistre als politischer Theoretiker*, *Forschungen zur mittelalterlichen und neueren Geschichte*, vol. ii (Munich 1929); Laski, H. J., *Studies in the Problem of Sovereignty* (New Haven 1917) ch. v; Dermenghem, Émile, *Joseph de Maistre mystique* (Paris 1923); Goyau, Georges, *La pensée religieuse de Joseph de Maistre* (Paris 1921); Latreille, Camille, *Joseph de Maistre et la papauté* (Paris 1906); Paulhan, Frédéric, *Joseph de Maistre et sa philosophie* (Paris 1893); Morley, John, *Biographical Studies* (London 1923) p. 165-239.

MAITLAND, FREDERIC WILLIAM (1850-1906), English legal historian and jurist. Coming at Cambridge under the inspiring influence of Henry Sidgwick, Maitland applied himself to the study of philosophy and was bracketed at the head of the moral sciences tripos of 1872. He studied for the bar and engaged in chancery practise but in 1884 returned to Cambridge to a readership in English law, and in 1888 he was elected Downing professor of the laws of England, a chair which he held until his death in 1906. It was Vinogradoff who inspired Maitland to explore the vast collection of original sources for the legal and social history of England which had been preserved chiefly at the Public Record Office. The first fruit of his lifelong research in this field was *Pleas of the Crown for the County of Gloucester* (London 1884), and his next an edition of the manuscript collection of cases which Bracton had formed and used in writing his treatise on the English laws and customs of the thirteenth century, and which Vinogradoff had discovered (*Bracton's Note Book*, 3 vols., London 1887). In his inaugural lecture in 1888, "Why the History of English Law Is Not Written" (*Collected Papers*, vol. i, p. 480-97), Maitland set forth the crucial importance of editing the mediaeval yearbooks and other law sources according to the canons of critical scholarship before the history of English law could be adequately written. As an earnest of his own efforts to this end there appeared his *Select Pleas of the Crown* (London 1888), the first of many volumes of original texts edited by him with valuable introductions for the Selden Society, which in H. A. L. Fisher's words was "the creature of Maitland's enthusiasm." Among his most important contributions to the society's publications were his editions of some of the *Year Books* of Edward II. A decade of such studies equipped Maitland remarkably for writing in conjunction with Sir Frederick Pollock the epoch making *History of English Law before the Time of Edward I* (2 vols., Cambridge, Eng. 1895; 2nd ed. 1899); in the collaboration by far the larger share of the research and writing was Maitland's. In this work Maitland synthesized the results of the detailed research carried on by himself and others. Unflagging he went on to other studies: *Domesday Book and Beyond* (Cambridge, Eng. 1897), *Roman Canon Law in the Church of England* (London 1898), *Township and Borough* (Cambridge, Eng. 1898) and *English Law and the Renaissance* (Cambridge, Eng. 1901). Aside from these books his essays and reviews (*Collected*

Papers, ed. by H. A. L. Fisher, 3 vols., Cambridge, Eng. 1911) treat with great brilliance the theory of the trust concept, the corporation (see also his introduction to his translation of a portion of Gierke's *Das deutsche Genossenschaftsrecht* as the *Political Theories of the Middle Ages*, Cambridge, Eng. 1900) and many other subjects.

Maitland was one of the most eminent figures in the intellectual life of his time. He was trained in philosophy as well as in law and history, skilled in palaeography and diplomatics and learned in all the sciences auxiliary to history. His reading knowledge of foreign languages was extensive; and in the introduction to the first volume of his series of the *Year Books* of Edward II he gave an account of the Anglo-French language in the early *Year Books* which has received warm praise from experts. He used these great gifts in the study of original materials for the illumination of the institutional and legal history of England. One of the marked features of his peculiar genius lay in the discovery of the truth of history hidden away in a mass of cold and crabbed documents. His aim was always to present a living picture of the men and institutions of the past. Only the best evidence would satisfy him; and in his hands such sources as *Domesday Book*, the Plea Rolls and the *Year Books* became human documents. But more important even than his capacity to vitalize the past was the fact that he wrote legal history as intellectual history. To him the history of law was primarily the history of ideas; and much of his attention was directed to a search for the origin of the ideas that are decisive in present day legal institutions. It is in this sense that he recommended that history be written backward. His preoccupation with the quest for the origin of ideas led him in his juristic thinking to a genetic and comparative method, but his mind was too fluid ever to be captured by any of the "schools." He wrote in a lucid, nervous style of his own which expressed admirably the elasticity, vividness and subtlety of his mind. Above all, his approach was broad and profound. By envisaging the history of English law as an aspect of the whole stream of English life he brought legal history into close relationship to political, constitutional, social, economic and religious history. His work revolutionized legal history and it has been the most stimulating of all the factors in the recent progress of historical studies devoted to England.

H. D. HAZELTINE

Consult: Smith, A. L., *Frederic William Maitland*

(Oxford 1908), with bibliography; Fisher, H. A. L., *Frederic William Maitland . . . a Biographical Sketch* (Cambridge, Eng. 1910); "Gossip about Legal History: Unpublished Letters of Maitland and Ames," ed. by H. D. Hazeltine and P. H. Winfield, in *Cambridge Law Journal*, vol. ii (1924-26) 1-18; Holdsworth, W. S., *The Historians of Anglo-American Law* (New York 1928) ch. v; Vinogradoff, Paul, *Collected Papers*, with a memoir by H. A. L. Fisher, 2 vols. (Oxford 1928) vol. i, chs. xiii-xiv; Holmes, O. W., Gray, J. C., Saleilles, R., Meyer, P., Brunner, H., Liebermann, F., Redlich, J., and Zocco-Rosa, A., in *Law Quarterly Review*, vol. xxiii (1907) 137-50; Figgis, J. N., *Churches in the Modern State* (2nd ed. London 1914) appendix II, p. 227-65; Gooch, G. P., *History and Historians in the Nineteenth Century* (2nd ed. London 1913) p. 393-99.

MAITLAND, JAMES. See LAUDERDALE, EIGHTH EARL OF.

MAJORITY, AGE OF. The period at which the child becomes a man is not fixed in the same way in all types of society. In primitive society the phenomenon of puberty marks the dividing line which indicates the attainment of social majority, the capacity to take part in the ceremonial and social activities of the group. The elaborate ceremonials which follow the reaching of puberty among some races emphasize the social and religious factors. The legal consequences of puberty are incidental, if indeed any differentiation of legal rules has taken place. In matured legal systems the attainment of majority, marking the commencement of full legal capacity, is wholly legal in its nature, a norm arbitrarily posited; its artificiality conceals the non-legal elements of its origin and thus also weakens its legal force.

In mature legal systems the child remains a minor until a fairly advanced age after physical maturity in order to protect him from the consequences of his presumed intellectual immaturity. The interests of society, however, require that certain legal transactions undertaken by the minor should have legal significance. Not only must society be protected against possible criminal action on his part, but the interest in the security of transactions may require that he be held liable for tortious conduct and even for certain contracts.

The variety of method in determining the age of majority has been considerable. The age of majority may be specifically fixed at a period approximating puberty, as in the early Roman law, where it was twelve for females and fourteen for males, or else a maximum limit may be set for children who do not reach puberty at the

normal age. Thus the Hanifite school of Islamic law fixed fifteen years for both sexes. Most of the Germanic laws chose the rather early age of twelve for both sexes, which later under the influence of the Roman law was sometimes increased to fifteen. Again, the test of puberty may be completely abandoned and different ages of majority may be adopted for different classes of society. This was typical of feudal Europe. The ages selected often reflected economic motives: in the English law of the eleventh and twelfth centuries a burgess' son came of age when he could count pence, measure cloth and conduct his father's business; or again military motives: a knight's son in England and most of France came of age at twenty-one; sometimes the age selected seems rather arbitrary: fifteen years for the son of one holding in socage tenure in England, fourteen years for a villein's son under many of the French *coutumes*. Finally, a system of graduated majorities or else a single age of majority may be adopted for all classes of society.

The system of graduated majorities is typified in the later Roman law. Persons under the age of seven were *infantes*, *qui fare non possunt*; persons between seven and twelve if females or seven and fourteen if males were *impuberes infantia majores* who required the consent of their tutor for all legal acts which involved the assumption of obligations. After Justinian persons who were no longer *impuberes* but were less than twenty-five years of age required the consent of a curator for certain legal acts, particularly for bringing suit.

Modern legal systems have tended generally to adopt a single age of majority; Germany, which follows in a modified form the Roman rules—under modern German law a minor under seven years of age has no capacity while a minor above that age has ordinarily only a restricted capacity—is the outstanding exception. In England the overshadowing importance of the land law and the operation of the tendency for the law for the higher classes to become the law for all classes of society resulted in the substitution of the age of twenty-one for all persons in place of the feudal scale of ages. Similarly twenty-one became the age of majority for all of France in 1792 (now art. 488 of the *Code civil*). The same course of development as in France preceded the adoption of the graduated scale of majorities in the German Civil Code. A law of the German Empire of 1875 fixed upon twenty-one, superseding the different ages of

majority which prevailed under its various legal systems (e.g. twenty-one in the Bavarian, twenty-four in the Prussian, twenty-five under the German common law). The Swiss Civil Code has fixed the age of majority at twenty.

The relatively advanced age of majority in most modern legal systems may be explained not only by the complex character of modern social and economic relations but by the fact that the attainment of majority normally entails full legal emancipation. It is to be noted that the modern civil law institution of curatorship for adults has not had the effect of making the age of majority earlier than in common law countries where curatorship does not exist. In the Roman law the *patria potestas* persisted during the whole life of the *paterfamilias*. In the Germanic laws the child had to leave the paternal abode and establish his own household before the *mundium* of the father ended. Everywhere, however, it has been found impossible to confine the rules of capacity of minors within the straight jacket of a single relatively advanced age of majority, with the result that traces of the graduated system are practically universal. In all systems some scheme of graduated ages obtains for criminal and delictual liability, and there is often a special age for capacity to make a will. The compulsion to disregard the age of majority in such cases is obvious. Social institutions peculiar to one country may also be important, as, for example, the French rule (unmodified until 1927) forbidding a person under twenty-five to marry without the consent of his parents. In England the forces of competing local borough customs continued for a long time to mar the symmetry of the common law rule. The canon law fixed the capacity of an infant to make a will at twelve for females and fourteen for males and the capacity to act as executor at seventeen. Further many systems provide the possibility of an early attainment of majority; the *venia aetatis* of the Roman law has been influential in this respect. Thus in the Netherlands, where the age of majority is twenty-one, majority may also be attained before then by marriage or by receiving "letters of majority" from the High Court at or after the age of twenty. A limited "emancipation" may also be granted at the age of eighteen.

The rules as to the capacity of minors vary even more widely than those fixing the age of majority. The fundamental divergence lies in the adoption of the Roman conception of guardianship by the civil law countries. Every minor

has a guardian—a parent or some other person—who can act for him. In the French system the identification of the civil capacity of the minor with that of the tutor is almost complete, but some acts, such as alienation or hypothecation of immovable property and acceptance or repudiation of an inheritance, may be undertaken only with the consent of the *conseil de famille*.

In the English common law the simple device of guardianship for a variety of historical reasons never received complete development, and from an early date the rules of capacity of minors became greatly complicated. The guardian could not even represent the minor in litigation. The protection which the minor could have found in a developed system of guardianship had to be sought in the crude expedient of the demurrer of the parole, whereby in order to retain the status quo undisturbed all actions by or against an infant were suspended until he should reach his majority. So extreme a principle could not long remain in its pristine rigidity. Yet although it was radically modified it was not discarded. Indeed only the adoption of a fully developed system of guardianship could have destroyed all vestiges of the demurrer of the parole. At an early date the doctrine seems to have become applicable only to rights which the infant claimed through inheritance and not to those which he claimed through his own acts. Later the infant was permitted to acquire and own property and to sue through his "next friend" for money due to himself; he could be made liable for waste, trespass or failure to pay rent. He was not permitted, however, to make an irrevocable disposition of his property. If he attempted to do so, the transaction was not void but it could be disclaimed when he came of age. In the latter part of the sixteenth century the ingenuity of lawyers almost succeeded in killing the last rule. The infant would convey his property by common recovery, appearing in court by his guardian, who would fail to plead infancy. Since the infant was supposed to have a sufficient remedy against his guardian for his failure to plead, the conveyance was allowed to stand as irrevocable. In 1614 Lord Coke ruled that this expedient could no longer be used. Consequently the conception of acts which are voidable although not void still lay ready to hand when the law of contracts was developed. In two main cases, however, the infant was held to be bound—when he made a contract for necessities and when he acquired an interest in property to which obligations attached or entered into a contract which in-

volved obligations and then took some benefit under the contract.

Thus even in private law the age of majority cannot be viewed as a hard bright line separating the exercise of legal capacity from its non-exercise. In public law its significance disappears almost entirely. The selection of the age of twenty-one as the minimum age for the exercise of the electoral franchise has apparently come about only by analogy with the age of majority, since in many countries a different age requirement for electors is in force. Everywhere graduated systems of age qualification for the holding of public office are to be found.

A. H. FELLER

See: GUARDIANSHIP; CHILD, section on DELINQUENT CHILDREN; JUVENILE DELINQUENCY AND JUVENILE COURTS; FAMILY LAW.

Consult: Bicknell, B. A., *The Law and Practice in Relation to Infants* (London 1928); Bingham, Peregrine, *The Law of Infancy and Coverture* (London 1816); Fère, Victor, *Le mineur, sa condition générale et sa capacité contractuelle dans le droit anglais* (Paris 1923); Holdsworth, W. S., *History of English Law*, 10 vols. (3rd ed. London 1922-32) vol. ii, p. 97-99, and vol. iii, p. 510-20; Solazzi, Siro, *La minore età nel diritto romano* (Rome 1912); Hübner, Rudolf, *Grundzüge des deutschen Privatrechts* (4th ed. Leipsic 1922), tr. from 2nd German ed. by F. S. Philbrick, Continental Legal History series, vol. iv (Boston 1918) p. 54-59, and authorities there cited; El Ghamrawi, M. K., *La protection légale des mineurs en droit comparé* (Paris 1929).

MAJORITY RULE. Whenever a group of persons or of organized bodies is called upon to express a joint opinion or to draw up a joint resolution, the vote of the absolute majority of units—or in a few cases, such as some elections, the vote of the relative majority—is accepted as expressing the thought or will of the entire group. This axiom of collective life, which now prevails among representative bodies, collegiate courts, assemblies and organs of corporations, in plebiscites and elections—everywhere in fact except in strictly intellectual deliberations, where the validity of the conclusion cannot be ascertained by the weight of numbers—is the product of a long evolution and complicated interaction of historical factors. As it gradually became evident at an early stage of societal development that the greater number is also the more powerful physically, the advantages of a device for submitting peacefully to this superior force became increasingly apparent in various primitive groups and ancient states. But before this empiric observation could become crystallized into a general principle it was essential that the par-

ticular community should become imbued with the consciousness of its continuous homogeneity and of the potential advantages that the adoption of the principle might confer on the various social groups which might alternately compose that majority.

In the primitive community with its undifferentiated conception of law and its tendency to homogeneous expressions of will the decisions formulated by the elders were submitted for the approval of the populace, which might acclaim or repudiate them either by shouts, as in Sparta, or by the clashing of weapons, as among the primitive Germanic tribes. The transition to a less haphazard technique of arriving at the sentiments of the majority manifested itself in a number of Greek republican states, both aristocratic and democratic, which elaborated various precise forms of voting (*q.v.*). In Rome, where the majority was determined at sight according to the formula *Haec pars major videtur*, a clear differentiation was drawn between bodies, such as the Senate and the comitia, where the decision was taken by the majority and those where one magistrate, as, for example, the tribune, could by his veto thwart the expressed will of the community. The perpetuation of the tradition of majority rule during the Middle Ages was the work almost exclusively of the Catholic church, which in its synods and canonical elections adopted the classical principle, although even the church preferred over a long period of time to place a premium on unanimity as the infallible sign of God's voice rather than to sanction the mechanical superiority of numbers. During the eleventh and twelfth centuries secular Italy exhumed the majority rule along with other Roman traditions and thereafter applied it in very subtle forms, particularly in the Venetian republic. The Teutons and Slavs, on the other hand, were obliged to learn from their own experience the advantages of the device of majority rule and took over little from classical antiquity. The Germans, rooted in a long established tradition of individualism, found it difficult to introduce the technique into the procedure of their communal assemblies and political congresses; so that it was found necessary to impose upon each of the participants in the assembly an oath that he would not interfere with the carrying out of the resolution. The early Slavs, unfamiliar with the device of majority rule, relied entirely upon unanimity, some of them going to the length of beating, expelling and even drowning the dissenting minority.

The speed with which the technique of majority decision was developed in the various countries of antiquity and modern Europe was determined largely by a number of broader social and economic factors. In general it may be said that its application was materially advanced in situations where a common external danger compelled the minority to acquiesce peaceably or where the majority felt compelled by reasons of internal tension, whether economic, religious or political, to insure the effective execution of its decisions. Where the minority was unable to emigrate, the necessity of submission became still more imperative; and where the execution of the majority's decision was entrusted to a strong executive, much of the cumbersomeness inherent in the device was eliminated. The transition to majority procedure was facilitated also by the disappearance of deep social cleavages and by the break up of privileged oligarchic groups, which had hitherto exerted a weight altogether disproportionate to their actual numbers. It should be observed moreover that in the early stages of transition the majority technique was applied almost exclusively to less crucial decisions, which could be carried into execution without arousing active opposition, and that only after it had become thus tested was it extended to such critical spheres as the conduct of war and especially taxation, which continued until a late period to arouse the opposition of privileged individuals or corporations accustomed to immunity from financial obligations. It is likewise true that it first gained vogue among deliberative bodies which were not composed of delegated representatives of a constituency and which had no political prerogatives or executive responsibilities. The clergy gave an example of orderly deliberation to the cities, the cities and the clergy to the nobility, unions of a corporative character to looser organizations. A more immediate stimulus to the spread of the majority rule principle was the separation of the process of voting from that of debate, whereby it was possible to determine the exact personnel of a particular division.

Since the time of the Greeks various observers of this historical process had attempted to formulate and clarify in more scientific terms the issues involved. To Aristotle the practise was justified in that it was intimately bound up with the concepts of liberty and equality, which presuppose even in an aristocracy the possibility of the governed displacing the governing through the medium of the vote. The ideological foundations laid by Aristotle were built upon by the

political theorists of mediaeval Europe, who in addition developed with growing intricacy the simple Roman formula: *Quod major pars curiae effecit, pro eo habetur ac si omnes egerint*. The subtlety of many of their formulations, such as *major pars, sanior pars, major et sanior pars, unitas actus* and amendment of a non-unanimous decision by accession of the minority, was simplified in the doctrine of Marsilius of Padua, who was the first to insist that the *valentior pars* constitutes the ruling power in society.

The teachings of the canonists and of the commentators on ancient law and theory were widely utilized. In England during the fifteenth century the kings taught their parliaments to defeat the will of privileged and refractory minorities; the same was simultaneously done by the French kings in their Estates General. Nations which did not adopt the majority rule principle either ceased to be self-governing or opened the way to dismemberment or stagnation. In Spain, for example, the intransigence of the members of the Cortes, who clung to their traditional right of *disentimiento*, was instrumental in fixing upon the country a regime of unrelieved absolutism; the Diet of the Holy Roman Empire, which as late as the seventeenth century still refused to recognize the will of the majority in levying taxes, gradually dwindled as a unifying force. In Switzerland the failure to introduce the majority rule principle resulted in the break up of cantons; majorities were often declared incompetent in religious matters. A chaotic, undisciplined Diet was the cause of Hungary's loss of freedom, and in Poland the same situation had even more tragic results. During the sixteenth century the constitutional principle of *communis consensus* was interpreted in that country as necessitating unanimity in legislation, levying of taxes, elections and communal self-government; only collegiate courts observed the majority rule. Any deputy to the Diet or any country squire in a communal assembly could by his veto frustrate all deliberations, unless they were held under a special "confederate tie." It was not until the eighteenth century that it was realized that the only salvation lay in the adoption of the majority rule principle, but the neighboring states upheld by armed pressure the anarchy and the veto.

In those countries, however, which in the wake of France and England gradually improved the technique of the majority rule compromise this for a time contributed to the making of a strong centralized monarchy. But the new em-

phasis given to the doctrine of majority rule by the successive philosophers of natural law prepared the way for a more thoroughgoing democratic movement, which by 1789 was sufficiently integrated and articulate to challenge successfully the basic premises of the older process. Althusius and Grotius contended that in concluding the original compact society had bound itself to submit to the will of the majority; Hobbes and Locke added that the minority must therefore submit through physical necessity. Vattel and Beccaria conceded, however, that the minority might decide to separate from the community. Rousseau in his *Contrat social* went so far as to hold that in voting the citizen must endeavor to express not his own but the collective will; only thus can he be a free man, for in opposing this collective will he is at fault and should he succeed in imposing his own will he is no longer free. The Polish writer Konarski, a contemporary of Rousseau, without postulating an original compact presents what is perhaps the most convincing demonstration of the vital necessity of government by majority, which grants a perpetual privilege to none and permits an equal share of power to all. Helvétius in his concern for the happiness of the greater number was ready to sacrifice the interests of the minority, thus preparing the way for the arithmetical utilitarianism of James Mill and Jeremy Bentham, which served as the ideological corner stone of government by parties and of electoral reform movements throughout the nineteenth century. Since the French Revolution through its Declaration of Rights proved that by invoking the principle of majority rule authority and tradition can be overthrown, all constitutional life, particularly in republics and democracies, has been based upon the majority principle. This applies also to law courts, the only exception being the English type of jury, which requires unanimous verdicts. Majority rule thus came to be not only a system prevalent in a certain country or an institution or a method of voting but, except in a few quarters (see MINORITY RIGHTS), an absolute and generally accepted concept. The idea that as a rule truth, reason and justice are on the side of the majority became the keystone of the democratic credo.

The practical application of this general rule through the medium of the ballot takes various forms and sometimes meets with technical difficulties. A distinction is usually drawn between an absolute majority ($\frac{1}{2}N + 1$) and a relative majority (for example, 5 votes against 4 and 3

in a total of 12 votes); sometimes a two-thirds or three-fourths majority is required or, very rarely, the agreement of more than half of all those entitled to vote. As a general rule the absent are not counted, while various regulations treat differently those who abstain from voting. A certain prescribed number of members present, the so-called quorum, is usually sufficient, but even a decision taken without a quorum is valid if it was not questioned before the vote.

Since the aim of majority rule is to record a constant will and not a passing impression, two or three polls, or "readings," are often required. When the question admits of more than one answer and not simply of yes or no, the proposal receiving the smallest number of votes in the first poll is eliminated, and eliminations follow until one of the two remaining proposals can gather an absolute majority—a procedure which has resulted in a tendency on the part of those without a definite opinion to vote rather irrationally for the first proposal presented. In conformity with the example set by England assemblies vote first on the amendments, then on the proposals, it being understood that the adoption of an amendment does not preclude the acceptance by the voters of the entire proposal. These subtleties have come into vogue because it has been learned from experience that many members of assemblies more readily express their negative than their positive reactions at the beginning of a deliberation.

The principle of majority rule in its modern form excludes the veto of the king or of a non-elective body, such as the upper House in England or in pre-war Austria, as it does also electoral categories or classes which confer an advantage upon the aristocracy or plutocracy. All the struggles for an equal, direct, universal and secret suffrage during the nineteenth century were intended to sanction what Herbert Spencer called the divine right of the people, i.e. the absolute domination of numbers. Despite these high hopes, however, genuine majority rule remains for a number of reasons an ideal rather than a reality.

First of all it has been found possible by skilful manipulation on the part of rulers to bring into existence a specious majority, which conforms only in appearance to the actual principles of majority rule. As early as the fifteenth century the French kings found it possible to group the representatives of the people in such a way as always to obtain a majority for their proposals, while at a subsequent stage of devel-

opment the democratic politicians of the nineteenth century invented the technique of "electoral geometry" or, as it was called in the United States, gerrymandering. By clever districting of the electoral constituencies this device secured a preponderance of seats for certain parties; each seat was obtained by a narrow majority, while other constituencies received fewer seats, although each of them was supported by a large majority of electors. Similarly the Polish electoral statute secures supplementary seats from a so-called state list, not for the party whose supporters are too dispersed to win them in a particular constituency but precisely for the party which has already obtained a considerable number of seats.

Such devices as these are inspired by the desire to avoid disturbances which would arise from an unbalancing of parties and violent shifts of opinion in the legislative body. Since the representatives of the people have almost without exception shown a tendency not only to legislate but also to rule, they have been forced under many circumstances to unite into blocs so as to obviate the necessity of guessing on the occasion of each ballot the transient desires of their constituents and of forming new groups with every change in opinion. In the representative body the majority seldom holds a ready opinion on a given problem; the groups sharing certain common interests often constitute less than half of the nation, and frequently in an apparently homogeneous group social and intellectual clash with material interests. In order to attain to power therefore those who want protective tariffs, for example, associate with partisans of bimetallism, with opponents of the separation of church and state or with supporters of prohibition and thus form during the elections and later in the legislature a majority composed of many minorities. For this purpose electoral cartels, or joint lists, are formulated whereby one party gives over to the other its surplus votes, and unions of parties appear in the elections under a common name. As a rule, however, these ad hoc majorities tend to break up and reorganize rather frequently.

The more public opinion swings to violent extremes, whether to the right or to the left, the greater is the opportunity afforded to a parliamentary group representing a minority of the total voters to anticipate the direction of the new swing. If, for example, a liberal group obtains a two-thirds majority, a radical wing representing, say, two thirds of that group is able to exercise

a virtual domination despite the fact that its members may constitute only four ninths of the total voters in the country. A reactionary minority backed by a moderately conservative majority may likewise attain power. This tendency to non-majority government is aggravated by the fact that a large percentage of electors abstain from voting, so that the result is frequently decided by sections representing less than 50 percent of the population. Thus it has become a practise in some countries, in cases where a special effort is made to verify the will of the majority, such as a popular referendum or veto on fundamental questions, to interpret abstention from voting in a popular veto as tantamount to approval and in a referendum to disapproval.

In order to prevent the distortion and misrepresentation of the collective will in the legislature electoral systems have been devised under which the deliberative body is to constitute an accurate mirror of public opinion or, in the words of Mirabeau, "a geographical map," according to its territorial distribution and with all its variations. Several types and techniques of proportional representation received theoretical support in many quarters during the nineteenth century and within recent years have been increasingly applied in practise.

The majority principle and particularly majority government in its present day political manifestations exert a profound influence on broader social and cultural life. The fight for votes obliges political parties and in many cases non-political organizations to recruit partisans by any means whatsoever, even at the expense of social stability and harmony. A net of electoral propaganda is thrown about those who do not belong to any party and even in highly civilized communities blatant slogans, seductive catchwords, backed by financial resources and a strong electoral machine—sometimes even supported by the administration—are ceaselessly employed to befuddle the calm objective judgment of the voter. In the United States, where there is no "government by majority" in the sense of government responsibility before parliament, the fight for seats has less importance than has the presidential campaign, which is conducted with an eye to the hallowed tradition of "spoils to the victor." If it is true that unreflective partisanship is a regrettable by-product of the majority rule dogma, it may by comparison with the dogma of unanimity, to which Poland, for example, in the old days was willing to sacrifice clear and honest individual judgment, be the

lesser evil. Moreover while striving to secure the government for themselves parties under a system of majority rule learn to forget the minute differences which separate them and to subordinate secondary interests by uniting into blocs, sometimes even by forming larger parties—a process which simplifies the political game while leading the individual voter to give more constructive thought to general issues.

Naturally its Parliamentary Majesty the majority is not capable of dealing with everything. It is quite unfit, for example, to pass upon the intricate details of involved legislation and on the whole merely places an *ex post facto* public approval or disapproval on measures elaborated in advance by technical experts and lawyers; a complicated law therefore is usually accepted or rejected *en bloc*. In cases involving delicate issues which might easily compromise the whole party or certain of its members in the eyes of their constituents the parliamentary majority may authorize the government to act by special decrees. For all questions in fact the effective functioning of the majority is inconceivable without a hierarchy of technical and political authorities and a corporate discipline, which at times assumes the form of an openly recognized clique or caucus and at others attempts to disguise the real domination exerted by a secret organization. In the United States exaggerated party discipline changes the House of Representatives into a voting machine; speeches on the floor are for the benefit primarily of the press and of the constituencies and have an insignificant effect on the actual legislative process, which is controlled almost entirely in advance by a small minority composed of congressional committees collaborating with the administration.

The penetration of the majority principle into spheres other than that of parliamentary politics is less deep and at any rate less violent. In regional assemblies the majority rule is less stringently applied, in the first place, because the economic problems which predominate in these assemblies are matters of immediate and general concern and therefore require a compromise and, in the second place, because the decisions of these assemblies instead of being absolute must often be submitted for revision to higher authorities. Unions of liberal professions, compulsory or not, apply the majority principle in cases where their competence is recognized by their statutes; but if membership is not compulsory, the majority must use its

power with discretion so as to guard against secession on the part of the discontented. In economic organizations it appears natural that the majority of workers or of union delegates hold negotiations with the employers or decide a strike in the name of the minority as well; but it is less consistent with the pure principle of number when a majority of skilled workers' unions excludes from the advantages of a joint organization the smaller number of unions representing the unskilled workers, who in total numbers may bulk largest in the trade. An extreme caricature of "the greatest happiness of the greatest number" is the adaptation of the majority principle to corporation finance, where a few potentates possessing the preponderance of shares exert unchecked control over hundreds of small shareholders. Generally speaking, in economic life majority rule may lead to disastrous results. The interests of the cities, for instance, are often completely sacrificed to those of the village, or agricultural interests to industrial. Small wonder then that the demand has frequently arisen in these spheres for a transference of the center of gravity of economic decisions from the legislature to other bodies representing directly social and economic groups (*see FUNCTIONAL REPRESENTATION*).

Educational organizations, such as school councils, assemblies of professors and the like, submit to majority decisions on problems of education or administration but not in cases where the majority wishes to express the political or moral opinions of the whole. This is true also of religious organizations and various special associations, in which the majority has a strictly limited competence. Academies and scientific associations in order to prevent accidental majorities from neglecting certain branches of work distribute the funds designed for various purposes according to a proportion established and accepted in advance and require a qualified majority for the introduction of new members.

LADISLAS KONOPCZYŃSKI

See: DEMOCRACY; EQUALITY; UTILITARIANISM; SUFFRAGE; ELECTIONS; VOTING; REPRESENTATION; PROPORTIONAL REPRESENTATION; FUNCTIONAL REPRESENTATION; OBEDIENCE, POLITICAL; MINORITY RIGHTS; PROCEDURE, PARLIAMENTARY; PARTIES, POLITICAL; CONSENSUS; DICTATORSHIP.

Consult: Konopczyński, Władysław, *Liberum veto* (Cracow 1918), tr. into French by Mme. Korwin-Piotrowska, Université de Paris, Institut d'Études Slaves, Bibliothèque Polonaise, vol. ii (Paris 1930), and "Une antithèse du principe majoritaire en droit polonais" in *Essays in Legal History*, ed. by Paul Vinogradoff (Oxford 1913) ch. xvii; Zucke, A., *Über*

Beschlussfassung in Versammlungen und Collegien (Leipzig 1867); Gierke, O. von, *Das deutsche Genossenschaftsrecht*, 4 vols. (Berlin 1868-1913), part of vol. iii tr. by F. W. Maitland as *Political Theories of the Middle Ages* (Cambridge, Eng. 1900), *Johannes Althusius und die Entwicklung der naturrechtlichen Staatstheorien* (4th ed. Breslau 1929), and "Über die Geschichte des Majoritätsprinzips" in *Essays in Legal History*, ed. by Paul Vinogradoff (Oxford 1913) ch. xvi; Simmel, Georg, *Soziologie* (3rd ed. Munich 1923) p. 142-47; Baty, T., "The History of Majority Rule" in *Quarterly Review*, vol. ccxvi (1912) 1-28; Starosolskyj, Wolodymyr, *Das Majoritätsprinzip*, Wiener staatswissenschaftliche Studien, vol. xiii (Vienna 1916); Stawski, Joseph, *Le principe de la majorité* (Danzig 1920); Heinberg, J. G., "History of the Majority Principle" in *American Political Science Review*, vol. xx (1926) 52-68; Pirenne, H., "Les origines du vote à la majorité dans les assemblées politiques" in *Société d'Histoire Moderne et Contemporaine, Bulletin*, 4th ser., no. 24 (1924) 456-61; Ruffini, A. E., *Il principio maggioritario: profilo storico* (Turin 1927), "Il principio maggioritario nella storia del diritto canonico" in *Archivio giuridico*, vol. xciii (1925) 15-67, and "Il principio maggioritario nelle elezioni dei re e imperatori romano-germanici" in *R. Accademia delle scienze di Torino, Atti*, vol. lx (1924-25) 392-414, 441-92, 557-74, and *I sistemi di deliberazione collettiva nel medioevo italiano* (Turin 1927).

MALABARI, BEHRAMJI MERWANJI (1853?-1912), Indian journalist and social reformer. As a young man Malabari came under the influence of some Irish Presbyterian missionaries and of Dr. John Wilson, then principal of the Scottish College in Bombay. In 1880 he purchased the *Indian Spectator*, which he edited for more than twenty years, until it was merged with the *Voice of India*. In 1901 he took up the editorship of *East and West*, in the pages of which he described many social evils with a zeal and sincerity that commanded attention throughout the country. Gifted with a crisp and trenchant style and possessing lofty ideals, he laid bare the dark spots in the Indian social organization at a time when the contact with the West had led to the disintegration of the ancient mores and new mores had not yet emerged. He denounced the merchant class in Bombay as lazy and cunning, asserting that the enterprise and honesty which had hitherto characterized all mercantile transactions had disappeared. He showed that despite modern education the people were freely taking part in obscene religious rites and festivals and were acquiescing in the debauchery of the priesthood. Such was Malabari's strong indictment of Hindu society. It was on account of his strenuous efforts in the press and on lecture tours that the Age of Consent Act was passed in 1891. Malabari in fact sowed

the seeds of social reform in western India in all directions. In his profound conviction that it is in the middle ranks of life that the materials for a "mighty, puissant nation" are to be found in India, in his exhortation to the people to learn patriotism; to set the nation above caste, creed or race; to give up child marriage; to abjure priestcraft; and to create and organize a new national church founded on the simple tradition of good thought, good word and good deed, Malabari expressed the aspirations and ideals which in the last quarter of the nineteenth century were fashioning a new Hindu society in the crucible of conflict with the Occident.

RADHAKAMAL MUKERJEE

Important works: *Gujarāt and the Gujarātīs* (London 1882); *The Indian Eye on English Life* (London 1892); *The Indian Problem* (London 1894); *India in 1897* (Bombay 1898); *Bombay in the Making; Origin and Growth of Judicial Institutions in the Western Presidency, 1661-1726* (London 1910).

Consult: Karkaria, R. P., *India, Forty Years of Progress and Reform* (London 1896); Singh, Jogendra, *B. M. Malabari* (London 1914).

MALADJUSTMENT. The concept of maladjustment enters into the social sciences in a great number of forms and disguises. In the applications or arts dependent on the social sciences, such as psychiatry, criminology and social work, it has gained particular recognition and wide vogue. Variety of interpretation and frequent vagueness and even confusion are, however, exhibited in current usage.

Two main types of maladjustment, which may be called respectively technological and psychological, are to be distinguished. In the former the maladjustment falls within a scheme of social organization. The social system is itself in some sense and degree out of joint; its parts are not properly geared together so as to permit the adequate functioning of the whole toward the desired end of its operation. Here maladjustment is interpreted purely in terms of a social mechanism. When, for instance, the economist speaks of overproduction and underconsumption, of a disproportion between producers' credit and consumers' credit, of the excessive control of finance over industry, he is imputing maladjustment in this sense. By an extension of this usage the whole economic system may be impugned as maladjusted, as in the Marxist attack on capitalism, to the underlying conditions of production. It is in the sciences dealing with the technique of social organization—economics, law and government—that the concept

of maladjustment so understood is most in evidence.

Psychological maladjustment has an entirely different reference, although the condition which it designates may be represented as a consequence of technological disequilibrium. Here the maladjustment is attributed not to the social organization as such but to the socially conditioned, limited or repressed personality. Whatever the determinant factors may be, it is the individual who is represented as maladjusted within himself or in relation to his group. By an extension of this usage the smaller group may be thought of as maladjusted within the larger group or with respect to the social conditions which the larger group sustains. In this category the criterion of maladjustment is no longer as in the former the loss of efficiency or service technically realizable but directly the failure of the individual or individuals to attain some norm of behavior. The variability of such norms and the problem of their validity render the second type of concept more precarious.

In a purely physical sense the adaptation of any object whatever, organic or inorganic, animate or inanimate, to its environment may be conceived of as inevitable, universal, complete. In a biological sense adaptation is that relation of the living thing to its environment which admits the persistence of the species to which it belongs. The transition from the biological to the psychological sense occurs when the criterion ceases to be mere persistence or survival, when it is no longer mere living but a way of living which is sufficiently in accord with the individual personality to prevent the development of acute strains and frustrations. This distinction is not clearly observed by those biologists who with ethical intent freely apply the terms natural and unnatural to the conditions and activities of human society. When the issue is one of the conformity of a mode of life to specific socially derived requirements of such a character that the failure to attain them creates an abiding personal disequilibrium, the term maladjustment is superior to the naturalistic term maladaptation. As Sumner, C. Lloyd Morgan and others have pointed out, there is attained in the higher reaches of organic life an area of biological indifference within which alternative modes of life undeterred by sheer considerations of survival are possible. Hence the psychological concept of adjustment cannot be reduced to the biological concept of adaptation.

As this area of indifference grows, as in fact society becomes more elaborate, the opportunities or occasions for maladjustment increase. In primitive life the dominance of habits dependent on the simpler arts of self-preservation and confirmed by the more uniform discipline of life in the small homogeneous group is less conducive to maladjustment in the stricter sense. The savage may be hungry or sick or afraid, but these conditions are merely the contingencies of the scheme of life to which he is adjusted. He may violate or evade the code of his group, but he rarely questions its validity nor is he perplexed within his own milieu by the conflict of codes or standards. He matures within the system of mores into which he is born. The transitions of a society as changeful as it is complex are remote from him. His typical attitude toward the system remains unified and sacrosanct whatever his behavior.

It is quite otherwise in a modern society with its mobility and instability, its impersonal and distant controls, its inconsistent and clashing codes. Technological advances disrupt old habits, scientific discoveries disturb old thought complexes. The near groups of family and neighborhood lose their integrity, their communal quality. The individual grows out of or shakes off their controls as he enters the wider heterogeneous world of modern society. Frequently the emancipation is partial and the process is attended by conflicts, hesitations and doubts. Often, especially in smaller communities, the individual feels the pressure of the mores which he no longer accepts or he loses the assurance of an established order of belief and of life and is thus more at the mercy of circumstance. Moreover the stimulations and opportunities of the larger world have as their counterpart obstacles and frustrations. The economic struggle with its prizes and defeats, the competitive detachment of the individual and the swifter pace of a specialized life create various tensions. This is the setting in which many forms of maladjustment develop. When the transition from one set of habituations to another is sudden and complete, maladjustment is apt to be particularly manifest, as in the case of the soldier returning to peace conditions, the prisoner set loose, the countryman settling in the city, the peasant immigrant in the New World, the oriental thrust into industrialism. But these may be regarded merely as more extreme forms of the disturbances which are inherent in the changeful instability of modern civilization. The symptoms of

psychological maladjustment are most apt to manifest themselves at the crucial ages of the individual's life history, particularly at puberty.

Psychological maladjustment has consequently received an increasing amount of attention with a view to the development of practical arts for the mitigation, cure or prevention of the condition and its effects on personality. Various theories have been advanced as to the determining or precipitating factors. While the Freudian school stresses the disturbing effect, deep in the unconscious self, of sex inhibitions, others dwell more generally on the conscious tensions aroused by the conflict between the individual's desires and the restrictive demands of the social order. Some authorities, like Graham Wallas, have found a main source of maladjustment in the artificial character of urban civilization, which balks the inherited dispositions of man, or in the regimentation, monotony and narrow specialization of modern industrial work. Some, like Ogburn, point to the swift changes of a technologically inventive society, which induces nervous excitations and stimulates activities and habits that are unadjusted to the more slowly changing traditions and beliefs which form the cultural background of communal life. Others, particularly socialist authors, give more place to the insecurities of an economic system in which the individual or the detached family unit is subjected to competitive stresses and is at the mercy in respect of livelihood or fortune of precarious conditions far beyond the range of individual control. These various explanations are not necessarily alternative or contradictory but emphasize respectively different factors, the relative significance of which for different social situations requires to be assessed in a more comprehensive aetiology. Before this can be accomplished, however, greater attention must be given to the definition and the diagnosis of maladjustment. The norms to which maladjustment is relative vary with individuals and with groups, and it is futile to attribute maladjustment to those who merely follow different norms from those of their fellows. Maladjustment cannot be identified with such non-conformity and the psychiatrist, the alienist, the educationalist and the social worker must continually guard against such a tendency. It is only when the individual manifests symptoms of personal, or inner, disequilibrium—not when his personality is unified in a behavior discordant with that of his fellows, but when it is distracted by the failure to live his life in accordance with

a set of norms valid for himself—that psychological maladjustment can be predicated in any unambiguous sense. Unless this distinction is made, maladjustment remains a confusing and even a dangerous concept, as it implies both that the standards of the average man or of the majority are the measure of socialization and that they constitute the valid standards for all conduct within the group. A similar criticism may be brought against the more philosophical formulations, such as that of Spencer, which make adjustment the goal of living or identify the process of adjustment with progress. As sociologists like von Wiese have held, dissociation as well as sociation is involved in the social process and in the business of living.

This point is of special significance because of the recent development of agencies for the remedial treatment of maladjustment, such as child clinics, psychiatric clinics, sanatoria, reformatories, juvenile courts and special schools. While some types of behavior abnormality can be traced to psychological maladjustment, others may just as plausibly be regarded as expressing the modes of adjustment of variant personalities to their social environment. The case study method, as employed by Thomas, Shaw, Healy, Bronner, Mowrer and others, reveals varieties of behavior response which have been too loosely herded together under the rubric of maladjustment. But it is still not infrequently assumed that all forms of delinquency and criminality are due to maladjustments within the personality of the offender, just as all forms of genius have been explained by another school as a higher expression of mental disequilibrium. The finer analysis made possible by the accumulation of case studies is preparing the way for a more discriminating and limited use of the concept. A difficulty has been the further assumption that there is for every social group one normal mode of life, all deviation from which may properly be treated as maladjustment. This viewpoint is suggested in much of the literature of social work. Maladjustment is the generic category in respect of which the task of social work is most frequently stated by social workers themselves. The Milford conference of social workers, for example, defined this task as "dealing with the human being whose capacity to organize his own normal social activities may be impaired by one or more deviations from accepted standards of normal social life" (American Association of Social Workers, *Studies in the Practice of Social Work*, no. 2, New York 1929,

p. 16). But the recognition that there are variant norms no less than variant abnormalities is necessary if one is to distinguish those abnormalities which can properly be assigned to psychological maladjustment from those which must be diagnosed and treated in other ways.

Since perfect adjustment—if indeed this has any meaning in a changeful society—is never attained, the incessant activity of readjustment is an omnipresent factor of social change, particularly in the more complex civilizations. There are moreover maladjustments which belong to type situations affecting considerable numbers, at times a whole social or economic class. Such group maladjustments are the inspiration of the greater revolutionary movements. Furthermore, while the thesis that genius is ipso facto maladjustment is unacceptable, there is sufficient evidence to suggest that those varieties of genius which find expression in art, in literature, in social reconstruction and in activities of domination are frequently stimulated by a sense of personal maladjustment. In this connection it may be maintained that genius always strives toward a different and a more difficult level of adjustment than that which is sought and found in the ordinary activities of mankind.

R. M. MACIVER

See: ADJUSTMENT; ADAPTATION; ACCOMMODATION; PERSONALITY; MENTAL HYGIENE; PSYCHIATRY; CRIMINOLOGY; SOCIAL WORK; JUVENILE DELINQUENCY AND JUVENILE COURTS; GENIUS.

Consult: MacIver, R. M., *The Contribution of Sociology to Social Work* (New York 1931); Morgan, J. J. B., *The Psychology of the Unadjusted School Child* (New York 1926); Burrow, T., *The Social Basis of Consciousness* (New York 1927); Wallas, G., *The Great Society* (New York 1914); Ogburn, W. F., *Social Change with Respect to Culture and Original Nature* (New York 1923); Wiese, Leopold von, *Systematic Sociology; on the Basis of the Beziehungslehre and Gebildelehre*, adapted and amplified by Howard Becker (New York 1932) chs. xi-xx; Healy, W., and Bronner, A. F., *Delinquents and Criminals* (New York 1926); Mowrer, E. R., *Family Disorganization*, University of Chicago, Sociological series (Chicago 1927); Flügel, J. C., *Psycho-analytic Study of the Family* (3rd ed. London 1929); Thomas, W. I., *The Unadjusted Girl* (Boston 1923); Abbott, Grace, *The Immigrant and the Community* (New York 1917); Shaw, C. R., and others, *Delinquency Areas* (Chicago 1929).

MALATESTA, ERRICO (1853-1932), Italian anarchist. After being expelled from medical school for participation in a student demonstration Malatesta took up the trade of electrician. At first a Garibaldian republican, he joined the Italian section of the First International in 1872.

After the death of Michael Bakunin, his leader, he was the most active of the anarchist agitators and conspirators, participating in the revolts organized by the Bakuninists in Italy in 1874 and 1877. His life thereafter was an alternation of short sojourns and prison terms in Italy and tours in Europe, Argentina and the United States. Until 1919 his permanent residence was in London.

Although Malatesta founded no distinct school of anarchist thought, as early as 1876 he formulated the theory of what later was called communist anarchism. This was distinct from Bakunin's collectivist anarchism and was to find its chief theoretical exponent in Kropotkin. Malatesta envisioned the revolutionary process as a simultaneous action of all schools opposed to the existing system, leading to the expropriation of the capitalists and landowners. The anarchists would remain in opposition to any government constituted after the revolution and would endeavor by propaganda and example to win the majority to a stateless form of voluntary social organization. Experimentation would resolve differences among the various anarchist schools concerning problems of social organization and economic distribution.

In an endeavor to organize an anarchist-socialist-revolutionary party to prepare an armed revolution Malatesta sought to include anarchists of all schools, but his attempts at organization were opposed by many who saw in them a concession to the authoritarian principle.

Malatesta opposed support of either side in the World War, advocating the termination of the conflict by means of revolutions. In 1919 he returned to Italy and became editor of an anarchist daily newspaper, *Umanità nova*, in Milan. Confronted by the revolutionary situation of 1920 he held that the anarchists could not act without the cooperation of the other anticapitalist schools, since to try to enforce anarchism on the majority—to establish an anarchist dictatorship—would be contrary to anarchist ideology. He was nevertheless arrested in connection with the events of 1920 and entered upon a hunger strike. When his followers attempted terroristic protests against his imprisonment Fascists wrecked the offices of his newspaper. In 1922, when he attempted to publish a daily paper in Rome, his offices were again raided by Fascists. From 1924 to 1926 he published in Rome *Pensiero e volontà*, a theoretical review.

MAX NOMAD

Works: Propaganda socialista: fra contadini (Florence

1884, 17th ed. New York 1900), tr. as *A Talk about Anarchist Communism* (5th ed. London 1894); *La politica parlamentare nel movimento socialista* (London 1890); *In tempo di elezioni* (London 1890); *Al caffè* (Paterson, N. J. 1902; rev. ed. Rome 1924); *Il nostro programma* (Paterson, N. J. 1903); *Non votate!* (Mantua 1904); *Il suffragio universale* (Mantua 1904); *L'anarchia* (London 1891), English translation (London 1892). See also his articles in *Pensiero* (Rome 1903-12), and in *Pensiero e volontà*.

Consult: Nettlau, M., *Errico Malatesta vita e pensieri* (New York 1922); Zoccoli, E., *L'anarchia* (Turin 1907); Nomad, M., *Rebels and Renegades* (New York 1932) ch. i; Nettlau, Max, *Anarchisten und Sozial-Revolutionäre*, Beiträge zur Geschichte des Sozialismus, vol. v (Berlin 1931).

MĀLIK IBN-ANAS (713?-795), Moslem jurist. Mālik is the leading authority of the second of the four schools of law recognized by Sunnite orthodoxy. Most of his life was passed in his native city of Medina, where his interpretations of the legal traditions won him a position of great political importance. When the Alidic pretender Muḥammad ibn-'Abd Allāh seized power in Medina in 762, Mālik supported the cause of the rebellion with a legal opinion declaring that the oath of fealty to the Abbasside caliphs was not binding since it was obtained under constraint. For this he was severely punished by the ruling Abbasside. Later, however, he made his peace with the dynasty, and in the year of his death he was visited by the caliph Hārūn al-Rashīd when he passed through Medina.

Mālik came of an educated and influential family, his grandfather and one of his uncles having excelled in the lore and science of tradition. His principal teacher was the jurist Rabī 'a ibn-Farrūkh, known for his work in founding a system of law based upon independent rational interpretation (*ra'y*). Mālik himself, though he did not reject this approach in principle and was in fact blamed for following too closely in this respect the position of the Mesopotamian jurists, laid the greatest emphasis upon the idea of anchoring all jurisprudence in religion on the basis of the Koran and tradition. In this way a religious dress was given to what was essentially the customary law practise (Sunna) of old central Arabia and of Medina in particular. The establishment of the fact that a tradition existed on a given point was decisive for Mālik. In the case of conflicting traditions regarding the utterances or manner of life of the prophet he followed the consensus of opinion (*ijmā'*) prevalent in Medina. In such a case there was involved the question as to whether any religious objection had been raised against the given traditional solution.

Next to the infiltration of religio-ethical content into the material of the law Mālik is important because he represented the idea of systematization, although here he is not altogether a pioneer. His life work, the *Kitāb al-Muwatta'* (Delhi 1801), is permeated by the systematic tendency, and although it may not be the oldest code of Islam it attained by far the greatest influence; it had almost canonical authority, displacing contemporary works of equal merit. Obviously compiled in close connection with the author's lectures, the work was published in no fewer than fifteen versions, each differing considerably from the preceding, of which two have come down to us complete and exist in many printed editions.

Probably the best outline of the view of the Malikite school of law is the *Mukhtaṣar* (new ed. of original text by G. Delphin, Paris 1900) of Khalīl ibn-Ishāq (died c. 1374); a complete French translation of the *Mukhtaṣar* by M. Perron was published as *Précis de jurisprudence musulmane . . . selon le rite malékite* (Exploration de l'Algérie . . . Sciences Historiques et Géographiques series, vols. x-xv, 6 vols., Paris 1848-52); an English summary has been made by F. H. Ruxton from the French translation (London 1916). These views became the prevailing school of the western Islamic world. Upper Egypt, the Moslem states along the northern shore of Africa, whose orbit included old Moslem Spain as well as a large section of African Islam to the south, formed the extensive area in which the Malikite code enjoyed validity in practise.

ANTON BAUMSTARK

Consult: Ibn Khallikān, Ahmad, in *Biographical Dictionary*, tr. from Arabic by W. Mac G. de Slane, vol. ii (Paris 1843) p. 545-49; Goldziher, I., *Muhammedanische Studien*, 2 vols. (Halle 1889-90) vol. ii, p. 203-20; Macdonald, D. B., *Development of Muslim Theology, Jurisprudence and Constitutional Theory* (New York 1903) p. 99-103; Bergsträsser, Gotthelf, "Anfänge und Charakter des juristischen Denkens im Islam" in *Islam*, vol. xiv (1924) 76-81; Santillana, David, *Istituzioni di diritto musulmano malichita con riguardo anche al sistema sciafiti*, vol. i- (Rome 1926-); Brockelmann, Karl, *Geschichte der arabischen Litteratur*, 2 vols. (Berlin 1897-1907) vol. i, p. 175-76; Nicholson, R. A., *A Literary History of the Arabs* (2nd ed. Cambridge, Eng. 1930) p. 337, 366.

MALINOVSKI, ALEXANDR ALEXANDROVICH. See BOGDANOV, A.

MALKAM KHAN (1833-1908), Persian diplomat, statesman and journalist. Malkam Khan was born of an Armenian Christian family but

was educated among Mohammedans. After completing his studies in Paris he returned to Persia and toured the country as a conjurer. He offended the religious feelings of the population and was ordered to leave the country. He returned again a few years later to found a Masonic lodge, Farámush Khánah (The place to forget), but the shah, afraid lest it become a conspiratory organization, closed it and asked Malkam Khan to leave the country for the second time. For a while he served as Persian ambassador in London. On February 2, 1890, he began to publish a Persian newspaper in London called *Qānūn* (Law). The initial motive of the paper was personal resentment against the shah and his ministers, its editorials assuming that everything in Persia could be improved by a mere change of cabinet. The original personal motive was, however, soon forgotten and Malkam Khan became the leader of the radical opposition to the old regime. The *Qānūn*, of which forty-one numbers appeared in three years, criticized severely the arbitrary and lawless regime of the shahs, the backwardness of the country and its domination by the religious leaders and demanded a constitutional form of government and a new code of law. Malkam Khan received the support and co-operation of the famous Islamic reformer, Jamāl al-Din al-Afghāni. Copies of the paper were smuggled into Persia despite a strict censorship and were passed secretly from hand to hand for many years after their publication. The *Qānūn* was the most important single factor in introducing liberal rationalistic ideas into Persia and in initiating a strong nationalist movement.

AHMET EMIN

Consult: Browne, E. G., *The Persian Revolution of 1905-1919* (Cambridge, Eng. 1910); Sykes, Percy, *A History of Persia*, 2 vols. (2nd ed. London 1921).

MALLET DU PAN, JACQUES (1749-1800), Swiss political and social critic. Mallet du Pan, the son of a Calvinist pastor, studied at Geneva, then one of the most brilliant centers of political science in Europe. Abandoning the academic sphere for the more exciting career of publicist he collaborated with Linguet in the famous *Annales*. In 1783 he founded independently the *Mémoires historiques, politiques et littéraires sur l'état présent de l'Europe*, a suitable vehicle for a polyglot and cosmopolitan with an intimate knowledge of past and present European affairs. The *Mémoires* became merged with the *Mercur de France* and from 1788 until 1792 Mallet acted as political director of this important journal,

which during the first two years of the revolution was an organ of the aristocratic adherents of constitutional government. Linguet's awareness of the preeminent importance of the social substructure of the state he carried into the revolution, convinced that political authority was necessarily founded on force and on the economic subordination of the lower classes. As early as 1788 and 1789 he pointed out the essential issue of the crisis—the struggle of the third estate against the privileged classes. After the outbreak of the revolution he advocated, like Mounier and Clermont-Tonnerre, the establishment of a bicameral system, in which a lower chamber representing the third estate should have certain restricted powers alongside a strong monarch and an upper aristocratic house. But from 1791 on he veered steadily toward the extreme right, and in May, 1792, represented Louis XVI in a secret mission relative to the intervention of the German princes in the king's behalf. After August 10 he became an émigré, residing in Switzerland until the French invasion, when he fled to Germany and thence in 1798 to England. There during the last two years of his life he edited the *Mercur britannique* (1798-1800).

One of the few émigrés who retained some capacity for objective judgment, Mallet was an important observer and critic of the revolution. Despite a blinding hatred of the revolutionary changes, especially in the social and economic sphere, he sensed the overpowering vitality of the movement, the sources of which he analyzed in *Considérations sur la nature de la Révolution et sur les causes qui en prolongent la durée* (Brussels 1793; English translation, London 1793). He contrasted the galvanic force of the democratic uprising with the passionless attitude of the anti-revolutionary coalitions, which were fighting a war from which the "moral springs had been removed." He criticized the European governments for their lack of political wisdom in proclaiming their intention to effect a complete restoration of the old regime in France and pointed to the new social facts, such as the existence of a new class of property holders, which should influence the settlement of French affairs after the revolution. His program was essentially the compromise adopted by the Restoration government in 1814. While other émigrés reacted violently against reason and individualism, Mallet continued to uphold the right to think freely. In opposition to the "plot" theory of the revolution, which most of the émigrés eagerly

embraced, he pointed out the inexorable logic underlying the causes of events; frequently he played the prophet. Like Joseph de Maistre and a few other publicists he viewed the revolution as a drama in which foreordained catastrophes were unfolded and detected in its course the "finger of God." This theory found much favor with later determinists, particularly with the philosopher and historian Hippolyte Taine, who lauded Mallet's insight and attached much value to his writings.

PHILIPPE SAGNAC

Other works: Some of his papers have been collected as: *Correspondance politique pour servir à l'histoire du républicanisme français* (Hamburg 1796); *Lettre à un ministre d'état sur les rapports entre le système politique de la République française et celui de la Révolution* (London 1797); *Essai historique sur la destruction de la ligue et de la liberté helvétique* (London 1798), English translation (Boston 1799); *Mémoires et correspondance de Mallet du Pan pour servir à l'histoire de la Révolution française*, ed. by A. Sayous, 2 vols. (Paris 1851), English translation (London 1852); *Correspondance inédite de Mallet du Pan avec la cour de Vienne 1794-1798*, ed. by A. Michel, 2 vols. (Paris 1884); *Lettres de Mallet du Pan à Saladin-Egerton 1794-1800*, ed. by V. Berchem (Geneva 1896).

Consult: Mallet, B., *Mallet du Pan and the French Revolution* (London 1902); Descostes, F., *La révolution française vue de l'étranger, 1789-1799* (Tours 1897); Vallette, G., *Mallet du Pan et la Révolution française* (Geneva 1893); Cunow, H., *Die Parteien der grossen französischen Revolution und ihre Presse* (2nd ed. Berlin 1912) p. 169-76; Baldensperger, F., *Le mouvement des idées dans l'émigration française 1789-1815*, 2 vols. (Paris 1924).

MALLINCKRODT, HERMANN VON (1821-74), German publicist and politician. Mallinckrodt was the son of an aristocratic Westphalian landowning family. As early as 1848 Catholicism and romantic currents inspired in him strictly conservative political views. After studying law he was active in the Prussian administration, at first as burgomaster of Erfurt; he entered politics in 1852 as Westphalian deputy to the Prussian *Landtag*, where except for a period of four years he sat until 1863. Mallinckrodt thenceforth led the most outspokenly Catholic and conservative wing of the Center, for which his stirring speeches and numerous articles, especially in the *Westphalischer Anzeiger*, did much to win mass support.

He championed Catholicism against the attempt of von Raumer, Prussian minister of ecclesiastic affairs and education, to interfere with the church's independence. In the *Landtag* he joined the new *Katholische Fraktion* and soon became one of its leaders by virtue of his knowl-

edge of administrative questions and his deep moral passion. Looking toward final goals he followed the *Fraktion* into its alliance with the liberals against the government despite his conservative views. But when in 1859 the government passed from the hands of the *Junker* into those of the moderate liberals, he opposed the abandonment by the Catholic party of its name or of its aggressive policies; he held that to become the *Fraktion des Zentrums* would obliterate essential characteristics.

A legitimist and an advocate of Austro-German union, he opposed the war of 1866 and the resulting annexations. In 1867 he was elected on a clearly ultramontanist platform to the Diet of the North German Confederation, where he joined other adversaries of Bismarck in the federal constitutional association; here he became acquainted with Windthorst. Mallinckrodt's aim was to limit federal in favor of state power. On its establishment in 1870 he became a leader of the Center party, again insisting that its Catholic character be reflected in its name.

LUDWIG BERGSTRÄSSER

Consult: Schmidt, Franz, *Hermann von Mallinckrodt* (2nd ed. Munich 1921); Pfülf, Otto, *Hermann von Mallinckrodt* (2nd ed. Freiburg i. Br. 1901); Bachem, Karl, *Vorgeschichte, Geschichte, und Politik der deutschen Zentrumsparthei*, vols. i-viii (Cologne 1927-31).

MALLOCK, WILLIAM HURRELL (1849-1923), English publicist. The author of poems, novels and controversial works on religious and social questions, Mallock was known principally for his attacks on religious liberalism and on the democratic and collectivist trends in politics. His general social conservatism appeared in *The New Republic* (2 vols., London 1877; 2nd ed. 1877), a novel satirizing prominent publicists and literary men of the day, the first of his works to attract wide attention. Throughout his later works runs the doctrine that the reins of economic and political control lie properly and inevitably in the hands of minorities distinguished by superior brains and character. The reliable signs of these excellencies are to be found in economic success and social position, as these marks of distinction appear in a society where private property in its traditional legal forms is vigorously protected and free competition generally unrestrained by government and where political privileges are allotted on the basis of wealth and education. He contended that the increase in per capita wealth during the past century had been due almost wholly to the skill and diligence of financiers, industrial entrepreneurs

and inventors. The laborer, he argued, could by his efforts alone produce no more than he did a hundred years earlier.

Mallock's clear, epigrammatic style and agile use of factual detail attracted a considerable following, although professional statisticians attacked his work. He recognized no need to prove basic generalizations, which were for him assumptions indispensable for the discussion of political and economic policy; and although he criticized many evils of democratic society he was lacking in concrete proposals of alternatives. He was an important force in contemporary antisocialist propaganda.

FRANCIS W. COKER

Important works: *Social Equality* (London 1882); *Aristocracy and Evolution* (London 1898); *A Critical Examination of Socialism* (London 1907); *The Limits of Pure Democracy* (London 1918).

Consult: Shaw, Bernard, *Socialism and Superior Brains: a Reply to Mr. Mallock*, Fabian Tract, no. 146 (London 1909); Smith, Charles D., *Natural Monopolies in Relation to Social Democracy* (London 1909); Rockow, Lewis, *Contemporary Political Thought in England* (London 1925) ch. iv; Hobson, John A., "Mr. Mallock as Political Economist" in *Contemporary Review*, vol. lxxiii (1898) 528-39; De Leon, Daniel, *Marx on Mallock* (New York 1908).

MALMSTRÖM, CARL GUSTAF (1822-1912), Swedish historian. Malmström became professor at the University of Uppsala in 1877 and was also head of the Swedish Record Office for five years beginning in 1882. He was a member of the cabinet from 1878 to 1880 but played no political role. His fame rests chiefly on his great work *Sveriges politiska historia från konung Carl XII's död 1718 till statshvälvningen 1772* (The political history of Sweden from the death of Charles XII in 1718 to the revolution of 1772, 6 vols., Stockholm 1855-77, new ed. 1893-1901), which is considered among the most excellent of Swedish historical writings. Based on a careful study of the rich documentary material, it gives for the first time a comprehensive account of the troubled period in Swedish history known as *Frihetstiden* (the age of freedom), which was characterized by unlimited parliamentary power following as a reaction from royal autocracy. Malmström gives a detailed account of the economic and social development of the country in this period and analyzes with great clarity the struggle between the political parties as well as the obscure relations which existed between the political leaders and the foreign powers that threatened Sweden's independence. He is neither brilliant nor profound,

but his account of events fascinates through its clarity, simplicity and absence of rhetoric. Because of its subject and Malmström's treatment the work is exceedingly instructive, especially in view of the similarity between the political life of *Frihetstiden* and that of present day Sweden.

Malmström was a man of the old school, conservative, loyal and earnest, who considered the health of the state essential for the welfare of a nation. He was one of the first Swedish historians to master modern historical technique and always endeavored to avoid subjective judgments and constructions. He was one of the founders of the Swedish Historical Society, of which he was chairman for many years, and he exerted a strong influence on the younger school of historians.

LUDVIG STAVENOW

Consult: Stavenow, L., in *Historisk tidskrift*, vol. xxxii (1912) 217-21; Schück, H., in *Svenska Akademien, Handlingar*, vol. xxv (1914) 111-49.

MALNUTRITION. See **NUTRITION.**

MALON, BENOÎT (1841-93), French socialist. Malon, the son of a peasant, worked as a shepherd and farm hand; in 1865 he went to Paris, where he worked as a dyer in a factory and obtained some education in evening courses. His membership in the First International, which he joined in 1866, cost him two terms in prison but gained him a certain notoriety. On February 8, 1871, he was elected to the National Assembly, from which he resigned simultaneously with Henri Rochefort after voting against the peace treaty. He was a member of the important Commission of Labor, Industry and Trade of the Paris Commune, struggled up to the last day of the insurrection and then fled to Switzerland. He returned to France with the amnesty of 1880 and was with Jules Guesde one of the founders of the *Parti ouvrier*. Malon founded the monthly *Revue socialiste* in 1885, to which he devoted all his efforts until his death. He was the author of approximately twenty volumes of socialist propaganda and popularization.

In 1885 he separated from the *Parti ouvrier* and founded an independent socialist party occupying a theoretical position opposed to Marx and Guesde and closely akin to the more famous German revisionists. Malon considered the economic materialism of Marx to be narrow and formulated a theory of social evolution which postulated the ideals of justice and pure law as

effective basic forces. He argued that humanity carries in itself such preconceived ideals and pursues them from civilization to higher civilization, moving under their obscurely felt influence. He opposed to the revolutionary strategy of the Marxists the reformist method ("possibilism") and looked to universal suffrage and the aid of enlightened bourgeois elements to make revolutionary tactics unnecessary. While Malon is closely linked to the history of the Commune and of French socialism he exercised slight influence on the French labor movement in general.

ALEXANDRE ZÉVAËS

Important works: *La troisième défaite du prolétariat français* (Geneva 1872); *La question sociale, histoire critique de l'économie politique* (Lugano 1876); *Le nouveau parti*, 2 vols. (Paris 1881-82); *Histoire du socialisme*, 5 vols. (Paris 1882-85); *La morale sociale* (Paris 1886, new ed. 1896); *Le socialisme intégral*, 2 vols. (Paris 1890-91, 3rd ed. 1892).

Consult: Spuller, Eugène, *Figures disparues*, 3ième série (Paris 1894) p. 233-51; Peyron, Élie, "Benoît Malon" in *Revue socialiste*, vol. xxxiii (1901) 257-88.

MALTHUS, THOMAS ROBERT (1766-1834), English economist, sociologist and utilitarian moralist. Malthus' entire social and economic thought may be said to center about his theory of population. According to this theory population when unchecked increases at a rate so much more rapid than it is possible to increase food supply that numbers are constantly pressing on means of subsistence; or, as Malthus himself somewhat unfortunately put it, while population increases in geometrical ratio, food supply can increase only arithmetically. The law had been stated previously by a number of writers, and it was only in his analysis of the mechanism of adjustment that Malthus claimed originality. In the first edition of his *Essay on the Principle of Population* (1798) he limited the possible checks on population to misery and vice. The strong tendency of his thought was to consider that at least the bottom of the social pyramid was always at the bare physical minimum of subsistence. In the second edition (1803), which was greatly amplified and modified in the light of his intervening travels and reflections, he introduced a third check, "moral restraint," which he thought had operated in civilized countries to maintain even the laboring classes at a level considerably above the physical minimum. Thus he introduced the doctrine of a "standard of living" determined by "habit" rather than by purely physiological causes as a

regulator of population. But in either case his theory stressed the constancy of the standard, however fixed. The fact that a change in economic conditions brought no change of standard but only a decrease or increase of numbers at the same standard placed almost insuperable difficulties in the way of a permanent improvement in the condition of the working classes. In the later phases of his work he also developed greatly his ideas on the subsistence side of the problem, laying less emphasis on the empirical arithmetical ratio and more on the conditions underlying it. This led him to discover independently, although he was not the first to do so, the theory now called the Ricardian law of rent and its implication, the law of diminishing returns. The latter law, however, he never formulated explicitly.

Malthus' essay was in part an attack upon the indiscriminate policy of charity, particularly as exemplified by Pitt's poor law bill of 1796, which the conservative government was pursuing in its efforts to cope with the distress resulting from the breakdown of the feudal and mercantile society and the attendant emergence of modern industrialism. It was at the same time a devastating response to the utopian thinkers—represented chiefly by the rationalistic-anarchistic philosophy of Godwin—who under the impulse of the French Revolution had reexpressed in extreme form the optimistic version of English utilitarianism. To Godwin's thesis that a regime of ideal equality both in property and sexual relations could be brought into existence by the mere removal of institutional restraints and the release of the triumphant power of reason, Malthus replied that only the individual pursuit of self-interest working within the framework of the institutions of property, marriage and class division could save society from the unlimited increase of population and complete disintegration. Malthus' social philosophy represents a recrudescence of the Hobbesian current in utilitarianism, with important differences. He conceived of man as dominated not by a multiplicity of passions but by one, "the passion between the sexes." From this it followed that the Hobbesian conception of the basic disharmony between individuals was transformed by Malthus into the idea of a cleavage between the great classes—landlords, capitalists and laborers—into which society was divided by the conditions necessary to procure subsistence. Finally, Malthus like the other classical economists considers self-interest not as

wholly destructive but as the chief mitigating principle, the *vis mediatrix rei publicae*, enabling man to avert the worst of the evil consequences of the pressure of population. This is the last remnant in Malthus of any idea of a natural harmony of interests.

Some of the most prominent features of the classical system of economics resulted from the modification of the Smithian doctrines necessitated by Ricardo's acceptance of Malthus' ideas. The principle of population and the theory of diminishing returns and of rent were the principal elements which Ricardo worked into a theory of the distribution of wealth marked by the iron law of wages and the tendency of profits to decline. But while on the distribution side of the analysis Malthus and Ricardo were at one in substituting the assumption of class antagonism for the conception of the natural harmony of interests which, although modified by other elements, predominated in Adam Smith, they differed fundamentally with respect to the theory of value. The labor theory as foreshadowed by Locke and developed by Smith started from a "state of nature" characterized by a natural equality and harmony of interests. While Ricardo fully recognized the difficulties involved in its application to a capitalist society, on the whole he adhered to the same type of thought, although reluctantly. His followers, however, forgot his qualifications and hardened his theory into dogma. Malthus, on the other hand, emphatically denied the postulate of equality implied in the more orthodox form of the labor theory and based his theory of value as well as of distribution squarely on the principle of population. He was therefore more consistent than Ricardo, even though the general tendency of his work was more empirical; this fact and the implications of his basic principle led him at times in his discussion of value to emphasize demand rather than cost of production. It was also because of fidelity to the theory of population that Malthus favored moderate protection for agricultural products and became almost the sole exception among the economists of his time to the predominant free trade sentiment, as applied especially to the corn laws.

In addition to the great impetus he gave to demographic studies Malthus' ideas exerted an influence on social theory subsequent to the classical economics in at least two other important respects. First, the element of disharmony, which he introduced into the economy of competitive individualism, was one factor which

paved the way for Marx' use of the Ricardian doctrines in his theory of the evolution of capitalist society. Secondly, Darwin drew from Malthus important elements of the theory of natural selection. The tendency for reproduction to outrun subsistence, generalized to include all organic life, gave the surplus of numbers on which selection could operate. In fact Malthus himself made use of the phrase "struggle for existence."

TALCOTT PARSONS

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MALTHUSIANISM. *See* POPULATION; BIRTH CONTROL.

MALYNES, GERARD DE (flourished 1586-1641), English writer on economic subjects. Malynes, a prominent although apparently not a very successful merchant, held the post of assay master at the mint and was frequently employed both by Elizabeth and James I as adviser on commercial questions. Despite his extensive commercial experience his economic ideas as expounded in a number of books and pamphlets

centered about a faith in traditional governmental restrictions, particularly the bullionist measures, which were fast losing significance in contemporary business practises, and stressed the evils resulting from the unsupervised activities of foreign exchange dealers. In one of his first works, *A Treatise of the Canker of England's Commonwealth* (London 1601), he lamented that exchange had become a "merchandise" rather than a "permutation" of coins according to bullion content. Arbitrage operations (*cambio sicco*) and finance bills (*cambio fictitio*) he branded as concealed usury and attributed the depreciation of sterling to the machinations of private exchangers. In 1622 he became embroiled in the first important economic controversy in England. While his antagonist, Edward Misselden, declared in opposition to the bullionist doctrine that specie outflow was the result of an unfavorable balance of trade, Malynes argued that "both commodities and money are passive, since the exchange was invented, which is only active," and that inflow of specie could be insured only by restoring the royal exchanger with a monopoly over exchange transactions. During the course of the controversy he published besides *Maintenance of Free Trade according to the Three Essentiall Parts of Traffique* (London 1622) and the *Center of the Circle of Commerce* (London 1623) *Consuetudo vel lex mercatoria* (London 1622, new ed. 1686), which contains his whole system of economic ideas and is the most accessible source for a study of them. It is important also as the first comprehensive treatment of the law merchant by an Englishman and for its part in acclimatizing the commercial law doctrine of the civilians in English common law. In his *England's View in the Unmasking of Two Paradoxes* (London 1603) while paraphrasing Bodin's refutation of Malestroit he accused Bodin of neglecting the real issue—the differential increase in prices between countries resulting from the activities of exchange dealers. His attack upon usury in *Saint George for England, Allegorically Described* (London 1601) was mediaeval in flavor, although he realized that interest could not be forbidden and refuted Culpepper's proposal for a legal limitation of interest rates.

Despite the vigor of his writings Malynes, one of the foremost English bullionists, failed to convince his contemporaries that the cambists were responsible for gold outflow or to elicit enthusiasm for a monopoly sale of exchange, *par pro pari*, by the royal exchanger. For a cen-

tury of rising commerce his advocacy of a *monopietatis*, a conception in harmony with his general sympathy for the poor, had little attraction. "In vain," wrote Thomas Mun, "hath Gerard Malynes labored so long and in so many printed books." But in a sense the very dogmatism with which Malynes espoused lost causes helped to crystallize the views of his opponents and so to develop the balance of trade doctrines.

E. A. J. JOHNSON

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MAMIANI DELLA ROVERE, CONTE TERENCE (1799-1885), Italian writer, philosopher and statesman. Mamiani, who was born in Pesaro and educated in Rome, early became a liberal and patriot. Like so many of the leaders of the Italian Risorgimento he combined the vocation of an intellectual with the career of a man of action. In his early years he was professor of Italian literature at the Military Academy of Turin. In 1831 he took part in the revolutionary government at Bologna and after several months' imprisonment was exiled to Paris until 1846. During these years he was active as a philosopher, assuming a position of moderate empiricism and polemizing against the idealistic philosophy of Rosmini. After 1850, however, he made common cause with the Italian idealistic school, whose doctrines he sought to tie up with a modified form of Platonism. During the constitutional period of 1848 he was twice minister under Pope Pius IX. On the papal restoration and the occupation of Rome by the French in 1849 he retired to Genoa, where he established the *Accademia di Filosofia Italica* with the hope of founding a lasting school of Italian thought free from the fetters of theology. He was deputy in the Piedmontese parliament and minister of education under Cavour. He also taught the philosophy of history at the University of Turin from 1857 and after 1870 at Rome. Under the unified state he became a sort of high priest of the official philosophy, founding in this connection the important review *Filosofia delle scuole italiane*, which he edited from 1870 until the time of his death.

A large part of Mamiani's intellectual activity was devoted to the application of his philosophic ideas to questions of political and social theory.

In 1841 in a series of letters exchanged with Mancini he discussed the foundations of penology and held in opposition to the latter that the aims of law and morality were identical and that punishment was a matter of rewarding evil with evil. In a more important juristic work, *D'un nuovo diritto europeo* (1859), he sought to establish European public law on the foundations of liberalism and the self-determination of nationalities. Several of his works were devoted to the question of the church and religion. In his *Teoria della religione e dello stato*, which was placed on the Index, he assailed the privileges of all the churches, including the Roman Catholic, and maintained that they should be subject to the regime of public law as in the United States. He also outlined in his *La religione dell'avvenire* a positive and permanent religion for mankind on the basis of the everlasting revelation of God in the individual mind of man. In his last years Mamiani was preoccupied with social and economic questions and in a treatise entitled *Delle questioni sociali e particolarmente dei proletarij e del capitale* defended the institution of private property but pleaded for governmental measures to improve the economic condition of the proletariat. As always he maintained the primacy of the moral problem over economics and politics.

ALESSANDRO LEVI

Other important works: *Del rinnovamento della filosofia antica italiana* (Paris 1834); *Fondamenti della filosofia del diritto e singolarmente del diritto di punire* (Naples 1841, new ed. Livorno 1875), in collaboration with P. S. Mancini; *Poesie* (Paris 1843, new ed. Florence 1864); *Scritti politici* (Florence 1853); *D'un nuovo diritto europeo* (Turin 1859, 4th ed. 1861), tr. by Roger Acton as *Rights of Nations* (London 1860); *Confessioni di un metafisico*, 2 vols. (Florence 1865); *Teoria della religione e dello stato* (Florence 1868); *Le meditazioni cartesiane, rinnovate nel secolo XIX* (Florence 1869); *Compendio e sintesi della propria filosofia, ossia nuovi prolegomeni ad ogni presente e futura metafisica* (Turin 1876); *La religione dell'avvenire* (Milan 1880); *Delle questioni sociali e particolarmente dei proletarij e del capitale* (Rome 1882); *Del papato nei tre ultimi secoli* (Milan 1885).

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MAN. In bodily structure, in processes of growth, in long foetal development within the maternal uterus and subsequent suckling of the young at the maternal breast man conforms

wholly to the pattern of placental mammals. The inclusion of man in the primate order rests upon his possession of five mobile digits on hands and feet, provided with flat nails instead of claws, the thumbs and great toes being more or less capable of opposition to the ends of the other digits for grasping. This classification of man is further supported by an overwhelming number of identities and similarities in anatomical and physiological details. With the New World monkeys, the Old World monkeys and the anthropoid apes man shares the possession of a large and highly convoluted forebrain which overhangs the hind brain, bony eye orbits with nearly complete back walls, frontally placed so as to permit stereoscopic vision, and other structural minutiae which define the Anthropea, the highest of the primate suborders.

Man resembles all of the anthropoid apes, especially in the lack of an external tail, in the intricacy and pattern of cerebral convolutions, in the suspension of the viscera within the body cavity so as to permit erect posture without prolapsus or sagging, in serological or blood reactions, in the prolonged period of embryonic development and postnatal growth, in the reproductive cycle. The human animal diverges from the gibbon and approximates the great anthropoids primarily in the vastly greater body bulk and size, in the specialization of the bony pelvis for support and transmission of the body weight to the lower limbs and in lesser elongation of the fore limbs, the hands and the feet.

Man differs physically from the anthropoid apes and the lower primates in the great absolute and relative size of his brain; his supporting, non-prehensile foot with its massive, non-opposable great toe; the reduced size and lessened protrusion of his jaws; the development of a positive chin eminence and the absence of projecting, interlocking canine teeth; the possession of a lumbar curve and a basin shaped, tilted pelvis modified for the functions of balancing and supporting the body in the erect posture; greatly hypertrophied and elongated lower limbs adapted for biped gait; shortened and refined upper limbs with broad hands provided with long and perfectly opposable thumbs and short fingers; a prominent nose with well developed tip and wings; complete absence of tactile hairs or feelers together with a marked sparsity of secondary body hair except on the head, in the pubic and axillary regions and on the face of adult males; and the presence of full everted membranous lips.

Man as well as the monkeys and apes possesses a specially sensitive retinal area and stereoscopic vision not shared by the lower primates and other mammals; he is thus able to discriminate objects in relation to form, size and distance. It is doubtful whether these powers are employed by other primates to the same extent as by man. The sense of smell in the primates may be inferior to that of lower terrestrial animals, but little experimental evidence is available on this point. Hearing is probably as acute in primates as among the lower mammals. Especially developed is the sensitiveness of the hands in touch, in which respect man appears to outrank the apes and monkeys. The free employment of a superlative tactile and visual equipment is intimately related to the ability of "picturing movements," to the recollection of past events and to the anticipation of future actions. By the adoption of a terrestrial life and the assumption of an erect posture and biped gait protohuman primates emancipated their hands from locomotor functions and brought to full fruition the powers engendered by their bodily inheritance and fostered by the arboreal habitat of their ancestors.

Although apes and even monkeys have a limited ability to utilize and devise tools, man is the only animal who may be said to possess a material culture. He owes this acquisition to his superior intelligence and his greater ability to profit by experience rather than to any gift of manual dexterity or to any accident of environment. The development and transmission of culture are made possible by the power of articulate speech, the most effective means for the communicating of ideas and for the elaborating of mental processes. Man shares this power with no other animal. Physiologically it is related to the enormous size and complication of the human brain and of the entire nervous system. Yet no anatomist or physiologist can designate a single specific anatomical feature of man the absence of which determines the lack of language in the great apes. Even the so-called speech area, the third inferior frontal convolution of Broca, is distinguishable in the brains of chimpanzees and gorillas.

The complex and variable character of human social organization is also dependent upon cumulative transmission through the medium of language. The social groupings of man are culturally conditioned, whereas those of the subhuman animals seem to be principally instinctive. Zuckerman has demonstrated that the

factors underlying the associations of apes and monkeys are characterized by their continuous sexual nature, as contrasted with the intermittent character of the sexual bond in lower mammals. This permanent sexual association is a common possession of all primates, but man differs fundamentally from other members of the order in his more clearly defined sexual responses and their greater dependence upon cultural factors and in his appreciation of their social significance. These differences are possibly quantitative rather than qualitative (see LANGUAGE; CULTURE).

Since the evidence of biological science indicates that man has evolved from a lower primate ancestor, it is possible to fix approximately the time of his achievement of a human status by considering the data of palaeontology and geology. The first remains of primates occur in the Palaeocene, or Lower Eocene, the first period of the Tertiary epoch. In the Oligocene period primitive types of Old World monkeys first appeared, as did *Propliopithecus*, a very small gibbonlike ape which probably stands at or very close to the point where the common ancestral stock of the anthropoid apes and man branches off from the primate trunk. In the Miocene deposits of the Old World full fledged types of gibbons are already represented together with Old World monkeys and generalized forms of the giant anthropoid apes—the *Dryopithecus-Sivapithecus* group, which is probably ancestral to the present chimpanzee and gorilla and perhaps also to man. It was during this period that the ancestors of man probably attained giant primate size and became erect terrestrial bipeds. A small minority of students of primate evolution contend that the human ancestral stock diverged from the primate trunk before the development of ancestral forms of the great apes, probably in the Oligocene period. Wood Jones postulates an independent development of the human line from the base of the tarsoid trunk, thus removing from human ancestry both Old World monkey and anthropoid ape stages of development. Osborn thinks that man's ancestors became small, ground dwelling, erect walking primates as early as the Oligocene period and would exclude the generalized great anthropoids from the human line of descent. The consensus of expert opinion, however, derives man from a giant, brachiating, anthropoid stock and places the separation of the human branch from the generalized great ape stem either in the late Oligocene or more probably in the Miocene

period. Some of the best authorities maintain the close collateral relationship of man, the gorilla and the chimpanzee. No competent student accepts the view that man has descended from any existing type of anthropoid ape.

No remains of man which can be attributed with certainty to the Pliocene period have yet been recovered, but the fact that primitive human types were already widespread in the Old World is indicated by archaeological data of the beginnings of a tool making culture. The stone implements of extinct types of man are naturally more numerous and less perishable than their skeletal remains. For many years archaeologists have argued concerning the possibility of recognizing humanly chipped and utilized stone implements before the latter have been fashioned into unmistakable artifact types by convention and through the increased skill of their makers. The existence of amorphous chipped stones called *coliths* has been claimed in deposits of every geological period from the Eocene upward. A consideration of the palaeontological evidence as to the development of the primates and other mammals seems to indicate that no humanoid form was sufficiently highly evolved to reach a tool using stage before late Miocene or early Pliocene times. Ancestral forms of man, however, used and made tools before they had reached a degree of skill in their manufacture which would make such tools easily recognizable. While withholding decision on the difficult question of distinguishing between naturally chipped stones and those early and dubious *coliths*, one may yet accept the judgment of Breuil and Sollas that the implements found in the Red Crag at Foxhall near Ipswich, Suffolk, are genuine human artifacts. Moir's discovery of a floor on which early man lived, used fire and chipped unmistakable implements during the Upper Pliocene period amply attests the presence in England in preglacial times of a being already possessed of more than the rudiments of a material culture and presumably equipped with all of the physical attributes which can be distinguished as human. From the beginning of the Pleistocene, or glacial, epoch down to recent times there has been recognized and described a sequence of stone implement cultures which become more diversified and better defined in succeeding archaeological strata. In many cases the skeletal remains of fossil men of the later periods are associated with these implements in undisturbed deposits.

It is not yet possible to assign definite and

absolute chronological limits to the various stages of human development. Time scales have been developed by geologists to measure roughly the antiquity of different rocks and fossil beds. The estimates vary enormously according to the method used and the personal equation of the investigator. Probably the most precise method of determining geological age is by the study of the rate of disintegration of radioactive elements found in the igneous rocks of various periods. Such a radioactive time scale assigns roughly one million years to the Pleistocene period with its four glacial advances, perhaps six million to the Pliocene period and twelve million to the preceding Miocene. If such a time scale is tentatively accepted one must suppose that man's ancestors—giant terrestrial bipeds with emancipated hands and non-prehensile, supporting feet—appeared before the end of the Miocene period, or some seven millions of years ago. On the same basis the human utilization and fabrication of tools would begin at the latest in mid-Pliocene times and the beginning of culture would be dated approximately four million years ago. The regular and undisputed sequence of archaeological cultures of man, beginning with the Lower Pleistocene, stretches over more than one million years according to this calculation. Some geologists on the basis of sedimentation assign much shorter periods to the Pleistocene and preceding epochs, cutting down the estimates to one half or less of those yielded by the radioactive scale. The tendency of archaeologists working downward from the most superficial deposits to the oldest containing human artifacts is to be increasingly conservative in their estimates of the antiquity of human culture measured in lapse of years. Keith wishes to compress the Pleistocene and the Pliocene, within which are included the evolution of all known forms of fossil men from humanoid prototypes, into a total of 450,000 years. Ultimately, however, the student of man must depend upon the more exact measures of time developed by geologists and physical chemists rather than upon any archaeological estimate of the rate of culture change or upon any biological prejudice as to the period required for evolutionary modification.

Palaeontological evidence concerning the distribution of fossil primates sets up boundaries which delimit the probable areas of man's differentiation from an apelike ancestry. In the New World there are no fossil anthropoid apes, nor have archaeological finds thus far produced

any convincing evidence of a high geological antiquity of human occupation. While it is still possible that further investigations may reveal the presence of man in North or South America during late glacial times, he could have reached the New World only as a comparatively late migrant physically evolved to approximately his modern status and having already acquired more than the rudiments of a culture, including some knowledge of navigation. The low zoological rank of the fauna indigenous to Australia precludes the possibility of higher primate evolution in this continent, although it was probably peopled in late Pleistocene times. In spite of the indubitably great antiquity of man in Europe and the discovery there of a number of the most ancient human types that continent must be considered primarily as a western extension of the great Asiatic land mass and seems to have derived its ancient fauna and early human inhabitants by migrations from Asia and from Africa.

During Miocene times giant generalized anthropoids of the *Dryopithecus* and allied families inhabited a forest zone extending on both sides of the Mediterranean from the Atlantic seaboard eastward and across the southern portion of Asia to its southeast extremity, including the Indian peninsula and presumably Indo-China and the adjacent great islands of Java, Borneo and Sumatra. Somewhere within this zone or at its margin the human stock probably differentiated from its anthropoid forbears. There are no convincing evidences favoring the claim of the African region of this anthropoid zone as the birthplace of man over that of Asia or vice versa, in spite of the predilections of many palaeontologists in favor of one or the other continent either on account of its size, its yields of ancient human or anthropoid types or the antiquity of its cultural deposits. It should be noted, however, that most students assume an Asiatic origin of the human family. Granting that man's humanoid precursor was a progressive anthropoid already adapted for life on the ground and virtually of present human size, it seems probable that such a terrestrial and migratory prehuman stock would disperse throughout the entire anthropoid zone and would at several places continue to evolve toward a human status, differentiating into a number of distinct genera and species. Such a view is polygenetic only so far as it postulates the diversification of several ancient species of man, of varying degrees of evolutionary development, from a common humanoid stock. The only scientific alternatives to

this opinion involve either the presumption that the common prehuman stock remained stationary in some unspecified geographical area and thence sent out successive human mutations of progressively higher evolutionary status, or that all of the morphologically heterogeneous and geographically dispersed types of fossil man can be arranged in some sort of unilinear genetic series, each directly descended from one of the others. The former view is favored by some students of human origins; the latter has few if any adherents. Neither is acceptable, for evolution is a continuous process operating upon all animal species in all places according to the requirements of natural selection and the possibilities inherent in their organisms.

Almost every year adds some new find to the considerable assemblage of skeletal remains of geologically ancient man. The most important of these are the *Pithecanthropus erectus* of Java, a being hardly human with a very small apelike skullcap and a quite modern femur indicating an erect biped gait; the *Sinanthropus* crania of Peiping, China, representing an advance over the Javan specimen in frontal and parietal brain development, with teeth showing enlarged pulp cavities; the enigmatic *Eoanthropus* of Sussex, England, with essentially modern brain case and chimpanzeelike mandible having projecting canine teeth; the Heidelberg lower jaw—massive, chinless but splayed out posteriorly in modern fashion and provided with teeth of moderate size again showing enlarged pulp cavities; the Rhodesian man with gorillalike brow ridges, huge jaws in which are implanted badly decayed teeth of modern form and with features of the skull base and limb bones indicative of a completely erect posture; the rapidly increasing array of Neandertal skeletons, all with great brow ridges, low cranial vaults, projecting jaws, chins rudimentary or absent and "taurodont" teeth showing the enlarged pulp cavities. Difficulties constantly recurring in the interpretation of these fossil skeletons are: doubt as to their exact geological provenience; the possibility that a mixture of bones of different individuals and distinct species in the same deposit may result in reconstructions of fictitious types; ignorance of the range of individual, sexual and specific variation in fragmentary fossil forms, which causes anatomists to recognize new genera or species that may never have existed. There is no general agreement upon the genetic relationship of these various forms of ancient man, nor do geological facts afford a sufficiently precise dating of most

finds to enable them to be placed in a chronological sequence. The occurrence of a type in a given geological horizon does not necessarily imply that the form of man in question first evolved or finally became extinct in that period. Pliocene forms may persist into Pleistocene times and exist contemporaneously with newer and more progressive types.

Pithecanthropus erectus undoubtedly represents an intermediate form between man and his anthropoid ape ancestors. The *Sinanthropus* type of China seems to bridge the gap between *Pithecanthropus* and the more highly evolved Heidelberg-Neandertal line of fossil men with taurodont specialization and many generalized anthropoidal features. Rhodesian man may be an early offshoot of this same stock. The recent discovery of a series of skeletons in a cave at Athlit, Palestine, associated with a Mousterian stone chipping industry, possibly indicates a differentiation of a Neandertaloid group in the direction of a more modern and perhaps Australoid type. The Piltdown skull, *Eoanthropus Dawsoni*, if the association of mandible and brain case is valid, stands completely apart from the *Sinanthropus*-Heidelberg-Neandertal line and may be derived from the stock which ultimately produced all or nearly all the existing human varieties. Conservative students hesitate to place any of the ancient fossil types mentioned in the direct ancestral line of modern man, preferring to regard them as abortive offshoots. It is wholly possible, however, that future discoveries will disclose intermediate forms which will permit the assignment of one or more of these fossils to the stem which leads to *Homo sapiens*—to which, it is commonly held, existing types of man belong. This species has differentiated into three principal varieties, Negroid, Mongoloid and white, in comparatively recent times—perhaps not before the latter part of the Pleistocene period. The conception of the specific unity of modern man is based upon the physiological criterion of fertility in crossing; upon the common possession of many morphological features; upon the belief that existing differences between the principal human groups arise from conditions of domestication and from selection or adaptive modifications. Such modifications are attributed to climatic and other environmental factors which have operated upon geographically isolated human groups over long intervals of time. The morphological, physiological and psychological resemblances which unite all races of modern man are considered too numerous

and too close to be explained by the hypothesis of convergent evolution of separate stocks. While this argument has a certain measure of scientific validity it is not altogether compatible with the demonstrated multiplicity of species and possibly even genera of fossil human types. Several anatomically modern forms of fossil man have been found in Upper Pleistocene deposits. These display in certain cases combinations of features generally considered distinctive of the Negroid, Mongoloid and white groups. Some students regard these late fossil forms as undifferentiated prototypes of modern man antedating the segregation and intensification of Negroid and other group characters. It is equally possible to consider them early examples of hybridization, since similar combinations are found in recent offspring arising from known crossings of physically divergent races. The view here favored is that the principal varieties of modern man had already differentiated from a common stock before the end of Pleistocene times and that the prototype of *Homo sapiens* is still to be discovered. It must be recognized, however, that Negroids, Mongoloids and whites resemble each other in skeletal features more closely than any of them resemble the older fossil human types, to which, admittedly, separate specific classification must be assigned. This fact militates in favor of the opinion that all present human groups have sprung from some common ancestral stock rather than from diverse species of fossil man either known or as yet undiscovered.

The formation of races among the principal varieties of *Homo sapiens* is attributable to one or more of the following causes: inbreeding and selection of the favorable variations of groups isolated in specific physical environments; mutations; hybridization of physically diverse stocks and inbreeding and selection of the mixed offspring of such crossings; adaptive modifications of isolated groups to such environmental factors as diet, amount of moisture, intensity of sunlight and geographical elevation. Most anthropologists proceed upon the facile and probably erroneous assumption that different degrees of human pigmentation are directly attributable to amount and intensity of sunlight to which numerous ancestral generations have been exposed in some region of isolation, and that other racial characters are similarly environmentally actuated and in some inexplicable method transferred to and fixed in the germ plasm. There is, however, an almost complete lack of evidence

which would establish a direct causal relationship between any heritable racial anatomical feature in man and specific environmental factors. Race is a matter of a common physical inheritance from the same group of ancestors, and racial characters are inherited not acquired. The only dependable criteria of race are found in non-adaptive, heritable, physical features. These are due to inherent tendencies in diverse stocks toward variation along specified lines in different parts of the organisms, selected doubtless to some extent by their favorable or harmful character but largely of an indifferent nature and hence limited only by the variational capacity in the original strains. The mechanism of such racial differentiation is probably the secretions of the ductless glands, or endocrines, but the endocrine balance is also largely an inherited feature, not simply an effect of diet or other extrinsic factors.

The geographical distribution of finds of archaic types of fossil man may be roughly delimited by a quadrilateral, of which the northwest corner is at Piltown Common, Sussex, England, the southwest corner at Broken Hill, Northern Rhodesia, the southeast angle at Trinil, Java, and the northeast at Peiping, China. Only the Spanish peninsula with its finds of Neandertal man forms a westward salient of this quadrilateral. Within this area are included also all geologically ancient types of *Homo sapiens* heretofore discovered with the exception of those disinterred in a South African extension. Knowledge is at present insufficiently complete to allow more than a tentative or even speculative sketch of the original differentiation and dispersion of the human races from within this quadrilateral. The southwestern angle of the quadrilateral is not far from the probable center of diffusion of the African Negro stock, which seems to have dispersed from the lake region southward and westward. The southeastern corner was formerly the seat of an archaic, eastern branch of the Negroid group, which has now been pushed out for the most part to Melanesia by the southward thrust of mixed Mongoloid Malays. An ancient Negroid stratum has survived in the Indian peninsula, overrun and submerged by invasions of brunet whites. From the southeastern Asiatic angle there also migrated to Melanesia and Australia at some prehistoric period the archaic and problematic Australoids. The northeastern angle of the quadrilateral is probably somewhat east of the center of diffusion of the great Mongoloid stock, concerning

whose origin and affinities very little is known but who migrated in all directions from the central Asiatic plateau and peopled the New World. On the basis of present evidence the dispersal of the Mongoloids seems to have been subsequent to the occupation of the southeastern, eastern and northern Asiatic areas by ancient white and Negroid stocks which they displaced and with which they mixed. The central belt of the quadrilateral, extending on both sides of the Mediterranean Sea eastward through Mesopotamia and as far as India, seems to have been the ancient seat of long headed whites, who pushed out to the northwest in late Pleistocene times or possibly earlier and eventually extended their domain to Scandinavia and the northern Asiatic steppes and even as far eastward as China. The western half of the northern marginal band was probably the center of differentiation and diffusion of two brachycephalic white races—the Armenoids and the Alpines—and the eastern half the original home of the Mongoloids.

EARNEST A. HOOTON

See: ANTHROPOLOGY; ANTHROPOMETRY; BIOLOGY; COMPARATIVE PSYCHOLOGY; EVOLUTION; EVOLUTION, SOCIAL; CULTURE; SOCIETY; LANGUAGE; WRITING; DIFFUSIONISM; RACE; MIGRATIONS; ARCHAEOLOGY; PREHISTORY.

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MANAGED CURRENCY. *See* MONEY.

MANAGEMENT may be defined as the process by which the execution of a given purpose is put into operation and supervised. The combined

output of various types and grades of human effort by which the process is effected is again known as management, in the human sense. Again, the combination of those persons who together put forth this effort in any given enterprise is known as "the management" of the enterprise. The term therefore covers the process of managing, the combined human ability involved in managing and the personnel required to manage.

The word is also generally used somewhat loosely to describe the general conduct and control of an enterprise, irrespective of the different functions involved. A more precise significance is, however, coming to be accepted, particularly among those whose studies require something approaching a technical meaning. In this more precise sense management is coming to mean the control of the process of executing a given policy and is to be clearly distinguished, as regards both the activities involved and the abilities required, from the formulation and determination of that policy, which is the task of the process known as administration. The two together constitute the control of the enterprise. In order that they may function a living structure is built by the process of organization, so that what is to be done and the persons to do it are grouped for the most efficient working. These three processes—administration, management and organization—are common to all corporate undertakings. They may assume different forms in different enterprises; they may be carried out indifferently or ably; each of those who perform them may participate in all three or concentrate on one alone.

The determination of this fundamental conception is slowly bringing about an understanding of the fact that although the enterprise of a church or school or hospital may be far removed in character from that of steel manufacturing and although both may be far removed from that of an army, all have similar basic principles of technique in their administration, organization and management. The study of these principles is perhaps one of the most modern phases of social scientific research; it cannot fail to bring the ideas of modern business management more into line with the principles which centuries of experience and study have proved valid for those far older forms of human association.

In every form of corporate human endeavor the infinitely developing complexity of modern civilization demands a higher ability in those

who control. As industry grew out of its earlier factory stages and the modern joint stock system of ownership matured, the owners of capital inevitably became more and more remote from the businesses they owned. The original proprietor-manager was replaced by hundreds, perhaps thousands, of shareholders drawn from all classes and often completely unacquainted with the concerns in which they were financially interested. This new system of ownership not only made industrial growth more rapid and extensive but also called into being as separate and distinct entities in the industrial structure the two newly recognizable activities of administration and management. Democratization of ownership led to specialization in control. The representation of capital in industry has therefore tended increasingly to be assumed by administration and management.

The sphere of management has become further enlarged as industrial operations have extended. Its practise is no longer merely a question of applying native intelligence and common sense; it demands in addition specialized knowledge and expert ability in many fields. Management has developed into a combination of techniques, which must be learned; and it is coming to be practised, like the older professions, on a basis of ascertained knowledge and established scientific practises. The developments which follow upon the growth of large businesses, the persistent stress of competition, the constant flow of inventions and improvements, the wide results of scientific research in many directions, the insistent necessity for better quality and lower costs and the urgent demand of the workers in industry for a higher standard of living and a more real share in industrial rewards have all contributed to render the task of management increasingly complex and responsible.

This enlargement of the sphere of management has come about partly through the growth in the size of industrial units and partly through the specialization made necessary by increased technicality. Whereas in the early stages of factory development the work of management was primarily concerned with the processes of production and even in that sphere was far from scientific, later growth has involved an ever widening field of management activity—the opening up of the new functions of research and planning in production, distribution and office routine and, equally, the development of the new industrial functions of comparison (involving

the close study and control of statistics in every branch of an enterprise) and advertising. Accounting has advanced from the quill pen stage to the highly complex machine system. Calculation by guesswork has developed into the modern system of budgeting. Transport has become a highly specialized service. The supervision and guidance of labor and of working conditions have passed from the elementary stage to the technical in half a century. The study of machine and hand processes has been divided and subdivided, so that engineers, chemists, psychologists and research experts now find valuable occupation in work which an earlier age relegated to foremen and workers themselves.

In consequence of the specialization of management its organization, especially in larger enterprises, has become a major problem of administration. It is primarily a problem of co-ordination—of welding the many parts, each contributing to the execution of the governing policy, into one smoothly operating and effectively coordinated body. To this end administration is gradually perfecting its own technique, which involves a clear scheme for the determination and interpretation of policy and the checking of results, an orderly scheme for the budgetary control of all managerial activities, a well matured plan of corporate organization to insure the interlocking of every useful activity and, probably most important of all, a strong and ceaseless check upon the efficiency of the management personnel and the closest attention to its recruiting and conditions of work.

This essential specialization of management has in large measure determined the basic principle underlying the form of its organization, which must recognize the existence of these different techniques and permit each a full field for development. This principle of organization on the basis of functions—a grouping of activities, like with like—although sound as a single principle cannot in practise be taken as the sole principle. Experience has revealed what would equally have been revealed by wider study of organization through the ages and in other spheres: that the functional principle of organization needs tempering by other equally basic principles. It must be made to harmonize with the vital need for coordination in any enterprise; it must be regulated by the necessity of the centralization at various points in an organization of responsibility for results; it must be modified to insure the fullest possible contribution from all who constitute an organization. Yet it is true

that the basis of the form of modern organization most calculated to yield results is a functional basis, adapted to the needs of the particular enterprise and translated into practical shape in the light of other organizational principles.

One of the major germinating influences in the development of management has been the steady growth over the last half century of the use of scientific methods and the pressure from within and without to render the technique of management scientific in the same sense as other techniques. This objective became crystallized in the movement, generally known as scientific management (*q.v.*), which sprang from the original work of F. W. Taylor. This movement has emphasized the necessity for continuous research and experiment in every branch of management; it has promoted the establishment of standards of procedure, of methods and of results, based on the knowledge gained by research, and has built up a scheme of control based on these standards. These developments necessitated in those who perform the tasks of management a fundamental change in their approach to their work: guesswork must be replaced by systematized knowledge, a trust in fortune by a careful analysis of the problem in hand and a ready acceptance of tradition by unprejudiced research relentlessly pursued. In the work of management this movement has led to the rapid development of such activities as costing, time study, motion study, market research, production planning and budgetary control. It has interpreted into a philosophy the manifold changes inevitably and variously brought about in management and has given them character, form and purpose.

Despite the immense growth in the responsibility of management, the amazing extension of its activities and the ever deepening intensity and complexity of its work the preeminent factor in management remains the managerial personnel. The science of management, necessary as it is for the furtherance of managerial efficiency, remains ineffective except in so far as by the human art of managing it is fruitfully utilized. Scientific knowledge is an essential preliminary to the practise of an art, but the art itself calls for human skill, the human faculties whereby the science is effectively applied to particular circumstances. It is highly questionable whether enough thought and effort have yet been directed to providing all corporate enterprise with the highest possible caliber of managerial man power. In large measure the stand-

ard of man power can be raised by training, but it is only recently that organized educational work has been attempted on anything approaching an adequate scale. Equally, little has been done to lift out of the rut of the old empirical methods the immensely important task of selecting the managerial staff; and much yet remains to be done in the study of its working conditions, remuneration, status, system of promotion and direction. If there were devoted to these ends the same amount of thought and time that is devoted in most progressive concerns to the planning of new machinery or the lifting of an already high output, industrial efficiency and stability would be vastly increased. A committee set up by the Federated American Engineering Societies to study waste in industry estimated in 1921 that from 50 to 75 percent of the waste in certain lines of industry (boots and shoes, clothing, textiles, building trades, printing trades and metal trades) was attributable to shortcomings on the side of management and less than 25 percent to labor. It is in the direction of improving the man power of management that the greatest progress remains to be effected.

This is the case to an even greater extent in public institutions, national and civic government, educational organizations and the whole field of corporate activity. Society suffers setbacks and wastes as a result of this disproportion between the knowledge it possesses and the ability wisely and scientifically to apply that knowledge for the common weal. This disproportion is exemplified perhaps most clearly in the experience of Soviet Russia, which has abandoned private enterprise in economic life and has turned the state into a vast economic machine to function for the benefit of the masses but still finds itself dependent upon yet hindered by the state of efficiency of its managerial personnel. Within the broad lines of policy set by the leaders of the Communist party economic tasks and resources are allocated among the various individual trusts and plants. But the problem of execution rests with the managerial personnel within these, and it is their inability to perform their tasks which has to a considerable extent limited the progress of Soviet industry. It is to remedy this limitation that such liberal use has been made of foreign experts, who at once manage current production and train their successors from among the ranks of the Russian people.

In capitalist industry the scope of managerial discretion is limited by the requirement that

whatever is done must be profitable, in either the immediate or some more or less reasonable future. The touchstone of any managerial proposal must inevitably be its profitableness. Since, as Veblen has so clearly indicated, business profits in modern industry may sometimes be obtained at the expense of industrial efficiency, it is not necessarily true that the most profitable managerial policies from the standpoint of the individual firm are the most desirable from the standpoint of social interest. In the increasing specialization of management, however, and in the consequent increasing infiltration into managerial personnel of technically trained persons whose prime interest and desire are production rather than profits, one may perhaps see a possible agency for a new industrial revolution and for a conversion of industry into an agency for social welfare rather than for individual profit. Other writers, such as Brookings and Means, viewing the function of management particularly from the standpoint of the separation of ownership from control, have emphasized the diffusion of ownership and the concentration of corporate control in the hands of the managerial personnel; they have discerned therein the transformation of management from a representative solely of capital, interested only in obtaining the largest possible profit for the shareholders, into guardians of the social welfare, managing industry so as to assure to the shareholders a fair return, to the laborers a just wage and to the consuming public reasonable value. As those who practise the profession of management in all its branches come to appreciate this social purpose in their work—the vital service to the community which both the exalted and the humble in their ranks are rendering; as this conception of their work as a social service comes to be accepted as a professional objective; and as one and all come to feel their common unity in that service and a common pride in the good exercise of their profession, so will the standard of that service be raised to the level which its vast responsibilities demand.

OLIVER SHELDON

See: BUSINESS ADMINISTRATION; ADMINISTRATION, PUBLIC; SCIENTIFIC MANAGEMENT; PERSONNEL ADMINISTRATION; ENTREPRENEUR; EXECUTIVE; CORPORATION; LARGE SCALE PRODUCTION; EFFICIENCY; BUSINESS EDUCATION; LABOR-CAPITAL COOPERATION.

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MANCHURIAN PROBLEM. The problem of Manchuria centers around the conflict between the expansive West on the one side and the newly self-assertive East on the other. In so far as it involves China, Japan and Russia, the three states bordering on Manchuria, it is only a regional problem; but by reason of its implications, though less direct, for the United States and in a different sense for the major European powers it becomes a world wide problem of war and peace. The stake for which rival powers contend is the profit of Manchuria's economic exploitation.

Until the closing years of the nineteenth century Manchuria was virtually unknown and unpopulated and wholly undeveloped. Juridically it was part of China, as the Manchu dynasty which had ruled China since the seventeenth century emanated from Manchuria. After the overthrow of the Manchu dynasty in 1912 the Three Eastern Provinces, as the Chinese called Manchuria—Fengtien, Kirin and Heilungkiang—occupied a status between full incorporation into China and dependency. In actuality, how-

ever, Manchuria had already become a pawn in world politics. Russia had long before started its glacial movement eastward and had advanced so far into Asia as to necessitate a delimitation of frontiers. The Treaty of Nerchinsk in 1689 had fixed the Amur River watershed as the line; and by negotiations in 1858 and 1860 Russia obtained from China, which had already been humbled in two wars with western powers, the rest of what is now Siberia.

In 1894 the Sino-Japanese War broke out, signaling Japan's advent into world affairs. Japan won and in the Treaty of Shimonoseki in 1895 forced China to cede the Liaotung Peninsula, the southeastern tip of Manchuria. Russia, supported by Germany and France, then intervened and compelled Japan to relinquish the peninsula. As reward for this assistance Russia in the following year exacted from China the right to build a railway from Chita across Manchuria to Vladivostok with a view to shortening the trans-Siberian route. The agreement also gave Russia the right to acquire lands on both sides of the line for access to necessary construction materials as well as the right to administer these lands, which was subsequently unilaterally construed by Russia as the right to station military police. China was empowered by the agreement to own shares in the railroad company and to participate in its management, but this power became nominal only. In 1898 the battle of the concessions began, with each great state pressing for its share of China. To Russia fell a leasehold on the Liaotung Peninsula and the right to construct a branch of the Chinese Eastern Railway—as the line built in pursuance of the 1896 agreement is known—from Harbin south to Dairen on the Liaotung coast. Russia had succeeded in closing a grip around Manchuria, but the Russo-Japanese War was foredoomed.

The war came in 1904 and was closed in 1905 by the Treaty of Portsmouth, whereby the Russian leasehold on the Liaotung Peninsula was ceded to Japan together with the part of the Chinese Eastern Railway running between Changchun and Dairen, now known as the South Manchuria Railway, and all Russian rights connected therewith. It was further provided that both countries were to maintain a limited railway guard along their respective portions of the line. In December, 1905, China and Japan signed an agreement confirming the transfer and in a supplementary agreement Japan bound itself to withdraw its railway guard if and when

Russia did so. Russia did withdraw its troops on China's demand after the Bolshevik revolution but Japan has not done so to date. It is contended by Japan that China in a secret agreement concluded at the same time engaged not to construct any railways parallel to the South Manchuria Railway, but China denies the existence of such an agreement. China has subsequently constructed such lines, while Japan has protested against them; and this is the basis for some of the sharpest controversies between the two countries.

The original concession of the Liaotung Peninsula leasehold was for twenty-five years, expiring in 1923; the Chinese Eastern Railway was ceded for eighty years from date of completion, or until 1983, with a provision that China might recover the road by purchase in 1939. In 1915, however, Japan presented an ultimatum to China, forcing the latter to sign a treaty based on the so-called Twenty-one Demands, whereby the leasehold on the Liaotung Peninsula was extended to 1997 and the concession for the South Manchuria Railway to 2002. The right of repurchase in 1939 was revoked. China has since contended that this treaty, being extorted by *force majeure* and without quid pro quo, is invalid and that Japan's continued presence in Dairen, Port Arthur and environs is an act of trespass. It is a contention that Japan of course has not even recognized. This is the fundamental issue between the two countries and it is an irreconcilable difference. All other disputes in Manchuria as to the status of Japanese citizens, the right to purchase land and similar questions are corollary thereto.

Manchuria might have remained deadlocked by conflicting juridical claims had there not supervened the force which has changed all far eastern relations. This was Chinese nationalism. China set out to recover its alienated territory and sovereign rights. In south Manchuria it entered upon a railway building program with the object of laying down a system which would drain off Manchurian products via Chinese railways to Chinese ports instead of via the South Manchurian system to Dairen, the Japanese port. Simultaneously it sought by establishing banks, factories, mills and trading concerns to break Japan's economic monopoly. In north Manchuria it encroached steadily if indirectly on Russia's position. China had been on bad terms with Soviet Russia since the repudiation of the informal alliance in 1927 and the severance of diplomatic relations between the two

countries. There were numerous incidents and in 1929 China resorted to direct action. It seized the Chinese Eastern Railway, arrested a number of Russian employees of the line and deported several higher officials, including the general manager. Russia dispatched a military expedition into Manchuria and after inflicting a sharp defeat on Chinese troops compelled China to restore the status quo ante.

Between China and Japan ill feeling is of longer standing and incidents have been even more numerous. China steadily became more exigent and the military party in Japan more outspoken in demanding a "strong policy," by which it meant military punitive measures. A succession of minor clashes in 1931 precipitated the crisis. On September 18 the Japanese occupied Mukden, disarmed the Chinese police and took over the civil administrative machinery. One center after another was similarly occupied and before the end of the year practically all of Manchuria was under Japanese domination, including parts of what had been the Russian sphere. After an interval in which local governments were set up under the aegis of Japan, on February 18, 1932, the independence of Manchuria and Inner Mongolia was proclaimed and a new state set up under the name of, at first, Ankuo, later, Manchukuo, with subsequent de jure recognition by Japan. On March 9 Pu Yi, who had been deposed as emperor of China in infancy, was brought by the Japanese to Changchun and installed as dictator. At the same time all important branches of the new government were put under the supervision of Japanese officials. In short, Manchuria had become a Japanese possession but not without challenge. First, Chinese military units have continued a guerrilla campaign. Second, Soviet Russia frightened by Japanese encroachments brought up reinforcements and strongly fortified its borders. Third, the Occident intervened through the League of Nations and the United States.

Fundamentally there are two conflicts in Manchuria. One is between China and all other powers. China holds Manchuria to be its territory in law and wishes to make it so in fact. The issue then is between Chinese nationalism and the expansionist ambitions of other powers. The other conflict is among the great powers for the right to exclusive domination over Manchuria. By reason of propinquity, momentum and the urgency of necessity Japan is the most vigorous claimant. The necessity is, first, that of self-defense. Manchuria in the hands of some other

great power, as was threatened in the time of the imperialistic raids on China, would constitute a menace to Japan's continued existence as an independent nation. Early in the twentieth century the aggressive ambition of czarist Russia was the source of fear. Now Soviet Russia with the propulsive force of a revolutionary mission is again the source. Second, there is economic need. Japan is notoriously wanting in raw materials, especially those necessary to rapid industrialization. Manchuria is rich in raw materials, especially coal, and has considerable deposits of iron and minerals. It has vast uncut timberlands and in potentiality of agricultural development is comparable with the American northwest. Furthermore it is the world's principal source of the soya bean, of which over 200,000,000 bushels are now produced annually. Japan, being overpopulated, deficient in raw materials and food supply and committed to industrialism, must have access to raw materials, a market for its finished products and an outlet for the investment of surplus capital. All of these Manchuria offers. Its foreign trade in 1929 amounted to more than \$500,000,000, of which Japan had more than two fifths. Japan's investments there are estimated at more than \$1,000,000,000. The country is still sparsely populated, with some 30,000,000 inhabiting an estimated area of 450,000 square miles, including Jehol. But the pressure of population in China has been pushing between half a million and a million emigrants over the northern borders into Manchuria every year, and with peace in Manchuria this movement would advance rather than recede. The prospect is that in a measurable period Manchuria will be more heavily populated.

To Japan then Manchuria represents a huge vested interest and an economic outlet. Abstractly there is no reason why all Japan's needs from Manchuria could not be fulfilled without actual control. It could buy raw materials from Manchuria and sell its finished products there in the open market, having the advantage of propinquity over other foreign competitors. In actuality there are two reasons why Japan will not rely on the working of natural law. The first is precedent. Since Japan emerged into the modern world it has been the law of power politics that strong nations desiring access to the advantages of a rich, weak and undeveloped land will seize it if they can in order to enjoy a monopoly; therefore access to the benefits of such a land can be assured only by exclusive possession. This law has been in full operation

in the Far East and Japan refuses to believe that it has been abrogated; the evidence of a new spirit in international relations since the World War is not conclusive. Japan assumes instead that since China is not strong enough to hold Manchuria, some other power will take it unless Japan does.

The second reason rests on conditions in China. The first of these conditions is Chinese nationalism, which is economic no less than political. China aspires to the profits from Manchurian development for itself. China's railway program in Manchuria is evidence; even before hostilities broke out in Mukden in 1931 there had been a sharp diplomatic struggle over railways, and in large part the hostilities were precipitated by this struggle. While the rush of Chinese immigration into Manchuria offers promise as a market it tends also to fix a new economic polarization and to draw Manchuria into China's economic orbit. The population of Manchuria by Chinese would work to Japan's advantage if the Chinese remained passive and in a state of willing tutelage. But they will not so remain in either China proper or Manchuria; they are competing similarly in the foreign trading centers on the Chinese coast, in Shanghai, Hankow and Tientsin, and there too to the foreigner's disadvantage. The second Chinese condition affecting Japan's attitude is the breakdown of the traditional processes of government in China, as reflected in civil wars, banditry, maladministration and corruption, which although they may be inescapable in a period of societal transformation obstruct the channels of trade. To permit Manchuria to become an integral part of China would subject it to the same condition, whereas even under indirect Japanese hegemony it has been exempt.

The Manchurian problem is not only regional in scope. Soviet Russia is involved because it abuts on Manchuria and because of its interest in the Chinese Eastern Railway and the north Manchurian cities which the railway serves economically. After the Russo-Japanese War the two countries came to an understanding based on non-interference in each other's spheres. Until 1931 this was adhered to except in the abnormal years of the World War, and relations between them were undisturbed. Russia's mobilization on the Siberian border in 1932 was notification that non-interference remains a condition of peaceful relations. The interest of the western powers, notably the United States, has been to keep Manchuria a free field for economic

competition. To this end the United States has actively opposed every effort to detach Manchuria from China and has never conceded that Manchuria was exempted from the open door doctrine, the principle of equality of opportunity for all trading nations, laid down for China by John Hay. In 1915 after the Twenty-one Demands the United States sent identical notes to China and Japan asserting that it would recognize no treaty impairing the rights of the United States in China, the political or territorial integrity of China or the open door policy. The Nine-Power Treaty concluded in Washington in 1922 again bound the signatories, the nations having interests in the Far East, to respect the sovereignty and integrity of China and to confer "whenever a situation arises which in the opinion of any one of them involves the application of the stipulations of the present treaty." The issue could be evaded until 1932, because no occasion arose to test the question whether Manchuria was a part of China. In 1932 the issue could no longer be evaded. Intervention by the League of Nations and protest by the United States having proved unavailing to arrest Japan's advance throughout Manchuria, the United States on January 7, 1932, sent a note to China and Japan to the same effect as the one of 1915 but adding "that it does not intend to recognize any situation, treaty or agreement which may be brought about by means contrary to the covenants or obligations of the Pact of Paris of August 27, 1928." The Assembly of the League of Nations in resolutions passed March 11, 1932, took a similar stand, although less unequivocally. On this issue there can be no technical evasions. The western powers refuse to recognize the legality of Japan's authority outside the Liaotung Peninsula and the South Manchuria Railway zone or the existence of the so-called Manchukuo. Japan steadfastly refuses, as it always has refused since 1905, to recognize the right of any third power to interfere on the question of Manchuria. While conceding Chinese sovereignty, at least until the setting up of Manchukuo, it holds Manchuria to occupy a separate status by virtue of the treaties of 1905 and 1915.

In December, 1931, the League of Nations decided to appoint an international commission to conduct a first hand investigation in Manchuria. The commission, headed by Lord Lytton, published its findings in October, 1932. It decided against restoration of the status quo ante September, 1931, and against the maintenance

and recognition of Manchukuo; it recommended the autonomy of the Manchurian provinces under Chinese sovereignty, but with regard to Japan's peculiar interests, and the institution for this purpose of a special administrative regime for the provinces. It therefore advised the Council of the League to invite the Chinese and Japanese governments to convoke a joint advisory conference to draft treaties embodying the principles and methods of operation of the new regime.

Certain terms of reference were laid down for the guidance of this conference: internal order was to be maintained by a special gendarmerie organized and maintained with the aid of foreign advisers; all other troops were to be withdrawn; Japan was to be given the right of free participation in but not control of the economic development of Manchuria; the right of foreigners to settle and lease land was to be extended throughout Manchuria but with modifications of the right of extraterritoriality; a new agreement was to be drawn up for the operation of the railways in Manchuria, preferably on a basis of amalgamation of Chinese and Japanese lines, otherwise on a basis of joint operation under a Sino-Japanese commission with the assistance of a foreign adviser. To these proposals, however, Japan refused to give consideration and reiterated its determination to stand by its recognition of Manchukuo as an independent state.

NATHANIEL PEPPER

See: FAR EASTERN PROBLEM; CHINESE PROBLEM; INTERVENTION; IMPERIALISM; EUROPEANIZATION.

Consult: For bibliographies, "Manchuria," compiled by W. A. Slade, American Academy of Political and Social Science, *Annals*, vol. clii (1930) 393, and "Manchuria—a Bibliography," compiled by Pearl Snodgrass in *Bulletin of Bibliography*, vol. xiv (1932) 170-71. *The Manchuria Yearbook*, 1931 (Tokyo 1931); Clyde, P. H., *International Rivalries in Manchuria, 1689-1922* (2nd ed. Columbus, Ohio 1928); Young, C. W., *The International Relations of Manchuria* (Chicago 1929), and *Japan's Jurisdiction and International Legal Position in Manchuria*, 3 vols. (Baltimore 1931); Parlett, H. G., *A Brief Account of Diplomatic Events in Manchuria* (London 1929); Lattimore, Owen, *Manchuria, Cradle of Conflict* (New York 1932); Morse, H. B., and MacNair, H. F., *Far Eastern International Relations* (2nd ed. Boston 1931); Blakeslee, G. H., *The Pacific Area, an International Survey*, World Peace Foundation Pamphlets, vol. xii, no. 3 (Boston 1929) ch. iii; Yakhontoff, V. A., *Russia and the Soviet Union in the Far East* (New York 1931); Allen, G. C., *Modern Japan and Its Problems* (London 1928); Matsuoka, Yosuke, *Economic Co-operation of Japan and China in Manchuria and Mongolia* (Dairen 1929); Orchard, J. E. and D. J., *Japan's Economic Position* (New York 1930), especially ch. xxii; Crocker,

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MANCINI, PASQUALE STANISLAO (1817-88), Italian jurist and statesman. Mancini was born in Campania and studied law at the University of Naples. He soon acquired a great reputation as a jurist and professor of law. In the famous letters which he exchanged in 1841 with Mamiani he discussed the foundations of jurisprudence and especially penal jurisprudence, maintaining that moral justice must be combined with social utility and that the purpose of punishment is not only expiation but also prevention of crime. As deputy to the Neapolitan parliament Mancini composed on May 15, 1848, the solemn protest of the chamber against its dissolution by the Bourbon monarch and was forced to flee to Turin, where he soon became the most famous of the southern exiles, an outstanding lawyer and a professor of international law in the University of Turin, occupying a chair created especially for him. In his inaugural lecture on January 22, 1851, *Della nazionalità come fondamento del diritto delle genti*, he sought the vital principle of nationhood not in historical and natural factors, such as language, race and territory, but in the "consciousness of nationality." In advocating respect for every other nationality Mancini aimed to distinguish his theory of nationalities from imperialistic nationalism. The Italian school founded by Mancini applied the principle of nationality even to private international law, and its views were adopted in juridical form by the Italian Civil Code (1866), which regulates personal matters, family relations and the inheritance of aliens by the principle of national law rather than by that of domicile.

With Bluntschli and others Mancini was one of the founders of the Institute of International Law (1872) and became its president in 1873. In his political career Mancini was general secretary for justice at Naples in 1861, in 1862 minister of public instruction of the new King-

dom of Italy, from 1876 to 1878 minister of justice and from 1881 to 1885 minister of foreign affairs. He displayed great political and particularly legislative activity, combating capital punishment and the Jesuits, championing the abolition of imprisonment for debt and taking a great share in drawing up the new code of commercial law. As foreign minister he signed (May 20, 1882) the treaty of the Triple Alliance, which remained in force until the World War. Although he defended this treaty for political reasons he refused to join Austria and Germany in their demand for an internal reactionary policy, and he declared that Italy could never have considered the Triple Alliance as directed against England.

ALESSANDRO LEVI

Works: *Diritto internazionale: prelezioni* (Naples 1873).

Consult: Fusinato, Guido, *Il principio della scuola italiana nel diritto pubblico internazionale* (Macerata 1884), and *Il principio della scuola italiana nel diritto privato internazionale* (Bologna 1885); Carle, Giuseppe, "Pasquale Stanislao Mancini e la teoria psicologica del sentimento nazionale" in *R. Accademia Nazionale dei Lincei, Rome, Classe di Scienze Morali, Storiche e Filologiche, Memorie*, 4th ser., vol. vi (1889) 548-67; Ruffini, Francesco, "Nel centenario della nascita di Pasquale Stanislao Mancini" in *Nuova antologia*, 6th ser., vol. clxxxviii (1917) Supplement to issue for March 16, and "Il principio di nazionalità in Giuseppe Mazzini e in Pasquale Stanislao Mancini" in his *L'insegnamento di Mazzini* (Milan 1917) p. 17-58.

MANDAMUS is one of the "extraordinary" common law remedies, also designated prerogative writs, by which public administration is subjected to judicial control. As the name implies, it is a command, issuing from the sovereign to a subordinate jurisdiction, requiring the performance of a legal duty. Mandamus is defined by Blackstone as a command issuing in the king's name from the court of King's Bench and directed to any person, corporation or inferior court of judicature in the king's dominions, requiring the performance of some particular thing which appertains to an office and duty (*Commentaries*, III, 110). Mandamus was formerly used in the main to determine controversies regarding corporate acts or corporate or ecclesiastical office, while at the present time its principal use is in connection with acts or omissions of public officials. Originally, after the petition for the writ had been granted, the matter lay between the sovereign (acting in England through the court of King's Bench) and the subordinate, whose return to the writ, showing either com-

pliance or reason for non-compliance, was accepted as true, a practise that is similar in some respects to that which obtains in contempt proceedings at the present day. In course of time the person who had secured the writ (the relator) was permitted to question the truth of the return but only by a separate action against the respondent, and this is still the law in a few American states; but the logical development was to consolidate the mandamus proceeding with the action for the false return, and this was done in England, first, with limited application, by the statute of 9 Anne [c. 20 (1710)], then, generally, by the statute 1 Wm. IV [c. 21, sect. 3 (1831)]. In most states of the United States (frequently under statutory regulation) the pleadings in mandamus are in substance or also in form assimilated to other civil actions, leading to an issue of law or of fact upon which the right to relief is determined.

Mandamus is still available in the United States to enforce members' rights in corporations; this, however, constitutes a very minor and subordinate part of its function. Its chief use at present is to compel official action in accordance with law, where the public or a private interest demands such action. If a public interest is involved, the states are divided on the question whether proceedings may be instituted only by the attorney general or other public law officer or also by a private individual; if the official action is required only in the private interest, it is the aggrieved party who sets the proceeding in motion. Mandamus is thus the appropriate remedy where a license, consent or permit is withheld by an officer from a private party who has a right to it; in such a case adequate relief would be afforded neither by the possible liability of the officer to be removed from office by a superior for official misconduct nor by a possible cause of action against the officer for damages.

It is commonly said that only those official duties which are ministerial in character may be enforced by mandamus, and the term ministerial is then contrasted with the terms executive and discretionary. A distinction between ministerial and executive duty can be maintained only if the term executive is employed to refer either to the chief executive or to an official function the essence of which is the guidance or direction of a complex administrative course affected by varying circumstances. No mandamus has ever been applied for against the president of the United States. Occasionally the writ has been issued

against a state governor, particularly where he was ex officio member of an official board, and probably in most of these cases the governor acquiesced in the proceeding since it afforded the readiest means of judicial determination of a controversial point of law. In the case of a resisting governor the proceeding encounters the difficulty that the chief executive is not, in relation to the courts, a subordinate officer and that the court has no power to enforce the writ against him by contempt process, which he might nullify by the exercise of his pardoning power. The question, however, is somewhat academic.

Where the function is executive in the sense that it consists in the direction of a complex administrative course, the mandamus can at most require the bringing about of a result, and the impossibility of specifying steps to be taken will render it difficult to treat failure to bring about the required result as disobedience to the judicial mandate; judicial control might thus come to mean that the court instead of commanding the officer would have to substitute itself in his place and assume administrative direction. In Illinois it was thus held that mandamus was not available to compel the mayor of Chicago to close liquor saloons on Sundays in compliance with the law of the state [*People v. Dunne*, 219 Ill. 346 (1906)]. While a number of official functions are plainly of this character, there will be considerable doubt as to others: can a court compel the institution of a criminal proceeding or a fair and equal assessment of property for taxing purposes, or do these functions elude judicial enforceability? Courts will differ greatly on the question of practicability; the Supreme Court of the United States held mandamus inappropriate to force the directors of a railroad company to establish a station [*Northern Pacific Ry. Co. v. Washington*, 142 U. S. 492 (1892)]; and it was the impracticability of judicial control that led to the legislation introducing administrative commissions for the control of public utilities.

In the case of *Decatur v. Paulding* [39 U. S. 497 (1840)] the Supreme Court held that the secretary of the navy cannot be compelled to allow a pension claim, but two years before it had been held that the postmaster general could be mandamusd to comply with an award of the solicitor of the Treasury, to whose decision Congress had submitted a claim under a contract with the Post Office Department [*Kendall v. United States*, 37 U. S. 524 (1838)]. The postmaster's duty was treated as ministerial, while the allowance of the pension claim was treated

as discretionary, since it involved a controverted interpretation of a statute. If *Decatur v. Paulding*, which is considered a leading case, were to be understood as meaning that the necessity of interpreting a statute renders an official function discretionary, half the value of the remedy of mandamus would be lost, as subsequently recognized by the Supreme Court [*Roberts v. United States*, 176 U. S. 221 (1899)]. In only a few cases may it be assumed that it is the legislative intent that an administrative decision on a point of law should be final (pensions, public lands, possibly the classification of mail or of places in the civil service), and finality then means judicial non-interference, whether by mandamus or otherwise; but it can only be misleading to identify interpretation of a statute with discretion.

There are administrative functions which are discretionary in the sense that the official decision is left to be reached in accordance with the official's sense of wisdom, expediency or fitness. For a court to dictate the decision in such a case would be to usurp the administrative function; and this accounts for the principle that mandamus will not control administrative discretion. Administrative law, operating through mandamus, is greatly concerned with the problem of discretion. An unqualified discretion is rarely vested in officials exercising authority over private rights. Although the official may be free to decide one way or another, it is his clear duty to consider the case and to proceed to some decision, to decide fairly and without favor and to confine his discretion to legitimate considerations but to take into account all those that are legitimate. Without his discretion being touched he may be judicially controlled in all these respects. More than that: if discretion is based on a variety of factual considerations, it is reduced in so far as facts are undisputed, and skilful pleading may compel the official to admit or deny relevant facts; he must then be equally alert to bring out some decisional factor, which, since it is not bound up with definite provable facts, constitutes the irreducible minimum of his discretion. An apparent discretion may thus be resolved into lack of discretion; but a true discretion will defy analysis. Mandamus is thus the touchstone of administrative discretion.

The First Congress of the United States attempted to give the Supreme Court original jurisdiction in mandamus cases; but the court held in the famous case of *Marbury v. Madison* [5 U. S. 137 (1803)] that this could not be done,

since the original jurisdiction of the Supreme Court was exhaustively defined by the constitution. The federal judiciary acts have withheld from the circuit and district courts the power to issue mandamus except in so far as the power may be necessary to the exercise of a jurisdiction otherwise possessed (as, for example, mandamus to a city council to levy taxes to satisfy a judgment recovered against the city in the federal court). By a historical accident, however, mandamus may be issued by the Supreme Court of the District of Columbia and is thus available against the heads of departments and bureaus whose seat of office is in Washington. That a local court should be the only one vested with this prerogative jurisdiction may appear as an anomaly; but Congress has acquiesced in this condition, led perhaps by consideration of the advantages resulting from concentration of the remedy of mandamus at the center of government, where are located the heads of departments, chiefs of bureaus, and commissions, who possess the most important determinative powers in the federal administration. If the lack of power of the district courts to issue mandamus has not been felt to be a serious handicap to justice, it is also because injunction may be made to serve the same purpose—restraining a postmaster from obeying an order of the postmaster general not to deliver instead of mandamus to him to deliver, as in *American School of Magnetic Healing v. McAnnulty* [187 U. S. 94 (1902)]. It is true that the courts may be inclined to treat functions vested in high officials as beyond judicial control on the ground that they are discretionary, and *Decatur v. Paulding*, above cited, may serve as a convenient precedent in this respect. The consent powers of the Interstate Commerce Commission under the Transportation Act of 1920 have so far been almost immune from control by mandamus; but with the growth of federal administrative powers over persons and property the use of the remedy is apt to become more rather than less frequent.

In the states mandamus belongs historically to the jurisdiction of the highest common law courts of original jurisdiction; by constitutional provision the power to issue it is also often given to the highest court; local courts (county courts and so on) do not issue it just as they ordinarily do not grant injunctions. In many states the cause is still entitled in the name of the people or the state on the relation of some individual against the defendant; in others the real party is the plaintiff. Some states still observe the

practise of a petition for and grant of a writ, either "peremptory" or "alternative" according to whether the issue is one of law only or also one of fact; in others the proceedings, including the pleadings, are assimilated to other civil actions. The trial of the fact is in some states by the court, in others by a jury; since the administrative function is ministerial, there is an entirely independent finding of facts by the court. Where there has to be a petition for the writ, there still exists a remnant of the doctrine that its grant rests in the sound discretion of the court, which may be governed by considerations of public policy; but the exercise of this discretion is reviewable by the appellate court. If a mandamus is issued, disobedience to it may be dealt with as contempt of court. The recalcitrant official also exposes himself to an action for damages; this liability may become important if a political issue is made between the executive and the judiciary, for the chief executive may shield the official from contempt process by the exercise of the pardoning power, but he cannot protect him from a judgment for damages.

In England at the present time mandamus is a relatively uncommon remedy. The Civil Judicial Statistics for England and Wales show for 1928 ten applications for the writ and the rule made absolute in eight cases and for 1929 twelve applications for the writ and the rule made absolute in two and discharged in nine cases. The slight recourse to mandamus may perhaps be accounted for by the common availability of explicit statutory remedies where private rights depend upon official action; and in some cases declaratory relief may be an adequate substitute for mandamus.

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See: ADMINISTRATIVE LAW; COURTS, ADMINISTRATIVE; WRITS, LEGAL; PROHIBITION, WRIT OF; CERTIORARI; INJUNCTION; PUBLIC OFFICE; SEPARATION OF POWERS.

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MANDATES. Mandatum was a term of Roman law designating a gratuitous agency. The word mandate is used in civil law countries today with the same significance and has even been incorporated into the common law, but with the more restricted significance of a gratuitous bailment [*Cox v. Bernard* (1763), 2 LD. Raym. 909]. In international relations the term has been employed in cases such as the Lebanon (1860), Samoa (1887), Crete (1898), Manchuria (1905), Morocco (1906), where a group of states has designated an individual or a state to administer territory. The mandates system as a recognized institution of international law, however, originated in article 22 of the League of Nations Covenant. It may be defined as a system for the administration of certain backward territories by advanced states which act as mandatories on behalf of the League of Nations according to the terms of a trust, embodied in the Covenant and the mandate, which provides for the tutelage of the inhabitants until they are able to stand by themselves.

This system represents the compromises arrived at by the Allied and Associated Powers in reference to the disposition of the extra European enemy territories which they had occupied during the World War. Annexation of these territories was barred by the public pronouncements of war aims on the part of allied leaders, and restoration to the enemy state was equally barred by such pronouncements, which had denounced German and Turkish colonial ad-

ministration. Direct international administration had not proved a success in such cases as Samoa and the New Hebrides. Most of the territories were in no condition to be recognized as independent, while the most advanced of them had been made the subject of secret treaties among the Allies, which divided them into spheres of interest. Thus the adroit proposal of General Jan Smuts, developed by him from suggestions of the British Round Table group and published shortly before the opening of the peace conference, was seized upon as a way out. This proposal offered a measure of satisfaction to the allied occupants desiring annexation, because they could be made mandatories of the territories they coveted; and it would also please the idealists, because supervision by the League was to be assured. The native inhabitants might gain consolation by the pledge of eventual self-determination. Even the Central Powers would find the system more palatable than outright annexation by their enemies.

Although the formulation of this plan was a work of practical statesmanship reconciling conflicts of the moment, the basic ideas of the compromise had been developing through a period of over three centuries in the experience of the people of European origin with the "backward peoples" of America, Asia and Africa. The humane ideas of Queen Isabella, Bartolome de las Casas and Francis de Victoria concerning the treatment of the Indians of New Spain had been so widely circulated by the antislavery and humanitarian movements in England, the United States and France in the late eighteenth and the early nineteenth century that all colonial powers eventually found it convenient to explain their mission as a trust for the benefit of the natives or for the good of the world. International conferences, such as that at Berlin in 1885 and at Brussels in 1890, gave more concrete form to the duties of this trust with reference to central Africa, and the United States upon entering the colonial field after the war with Spain insisted that the Philippines were "an unsought trust which should be unselfishly discharged . . ." (President McKinley's message, December 3, 1900).

After the welfare of the inhabitants of dependencies had been admitted as an object of colonial activity, it was impossible to ignore the aspiration of such people for independence, especially as nationalism spread. The eventual self-determination of colonies was viewed with equanimity by nearly all British statesmen in the

mid-nineteenth century, and although the renewed imperialism of the 1870's temporarily curbed the idea, it was again emphasized when the United States in acquiring oversea colonies reiterated the ideas of the Northwest Ordinance of 1787 for the government of contiguous colonies. The Senate resolution of February 14, 1899, which secured enough votes to ratify the peace treaty with Spain annexing the Philippines, asserted that American rule should "prepare them for local self-government . . ." In the Jones Act of 1916 Congress asserted that "it is, as it has always been, the purpose of the people of the United States to withdraw their sovereignty over the Philippine Islands and to recognize their independence as soon as a stable government can be established therein . . ."

The obvious inconsistencies in the application of these humane theories as well as the growing interest of all states in an open door for trade and investment in colonial areas had long suggested the need for international supervision over these imperial trustees and guardians. The idea was notably expressed in President Roosevelt's proposal in 1906 for a "mandatory of all the powers" to govern Morocco. The emphasis given to international control in the numerous plans for a League of Nations during the World War included such control of colonial administration, particularly in the memorandum of January 1, 1918, presented by George Louis Beer; this memorandum proposed that "backward regions are entrusted by international mandate to one state." The form of such safeguards was elaborated by the British Round Table group and by General Smuts in December, 1918, and a definite plan for such control was embodied in the resolution of the Council of Ten, drafted by General Smuts himself on January 30, 1919. This was utilized with only slight modification as article 22 of the League of Nations Covenant. By the Treaty of Versailles (art. 119) "Germany renounced all her rights and titles over her overseas possessions in favor of the Allied and Associated Powers," which thus became burdened with the function of selecting mandatories and proposing the terms of the mandates. Turkey relinquished by the Treaty of Lausanne (1923) all claims to her territories to be placed under mandate with the exception of the Mosul area of Iraq, which was left to subsequent determination. In fact the principal powers had proceeded to assignment of these mandates before the Treaty of Lausanne was concluded.

Mandates

TERRITORIES UNDER MANDATE, 1928

TERRITORY	CLASS	MANDATORY	AREA (in square miles)	POPULATION (1926)
Iraq	A	Great Britain	116,511	2,849,282*
Palestine	A	Great Britain	9,010	887,000
Transjordan			20,000	240,000
Syria	A	France	52,000	1,416,954
Greater Lebanon			8,000	623,863
Total Near East			205,521	6,017,099
Tanganyika	B	Great Britain	373,494	4,336,438
Ruanda-Urundi	B	Belgium	21,429	5,000,605
Togoland	B	Great Britain	13,240	187,959
Togoland	B	France	20,077	742,808
Cameroons	B	Great Britain	34,236	667,061
Cameroons	B	France	164,094	1,878,683
Southwest Africa	C	Union of South Africa	322,393	235,804
Total Africa			948,963	13,040,358
Western Samoa	C	New Zealand	1,133	37,865
Nauru	C	Great Britain, Australia and New Zealand	9	2,217
New Guinea and south Pacific islands	C	Australia	91,300	421,050
North Pacific islands	C	Japan	830	54,421
Total Pacific			93,272	515,553
Grand Total			1,247,756	19,582,010

* As of 1919.

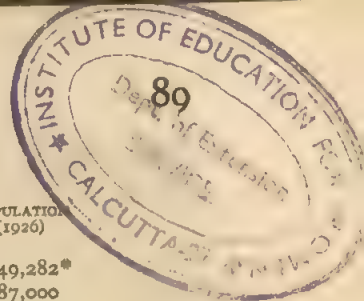
Source: Wright, Q., *Mandates under the League of Nations* (Chicago 1930) p. 629.

The position of the mandatory state resembles that of a trustee rather than that of a proprietor, in that its administration is not for its own advantage but for the benefit of the inhabitants of the mandated areas and the members of the League of Nations. Thus the Council of the League, advised by the Permanent Mandates Commission, has meticulously examined the accounts of mandated territories to see that public income derived from the territory is expended for the benefit of the territory and not utilized for the mandatory's own purposes. Furthermore the mandatory is not entitled to utilize the mandated territory for military recruiting, although because of Clemenceau's insistence native troops from French Togoland and the Cameroons may be used in case of general war for the defense not only of the mandated territory but of outside territories of the mandatory power. Moreover the mandatory is not to gain advantage in trade or investments for its nationals in the mandated areas, except in class C mandates, but is obliged to maintain an open door to all members of the League and, in pursuance of treaties subsequently concluded, to the United States as well.

The position of the mandatory state resembles

that of a tutor, or guardian, since it is obliged to administer the most backward of these areas so as to protect the natives from such abuses as the slave trade, the arms traffic and the liquor traffic and since eventual self-determination is the goal for all of the mandated areas. The Covenant makes it clear that the mandates system applies only to territories "which are inhabited by peoples not yet able to stand by themselves," that such peoples are under "tutelage," or guardianship, and that the character of the mandate must differ "according to the stage of development of the people" and other conditions. It suggests three distinctive types of territory, which have been designated A, B and C mandated areas.

In regard to the A areas the Covenant states that "certain communities formerly belonging to the Turkish Empire have reached a stage of development where their existence as independent nations can be provisionally recognized subject to the rendering of administrative advice and assistance by a mandatory until such time as they are able to stand alone. The wishes of these communities must be a principal consideration in the selection of the mandatory." These communities were organized under three mandates,



Iraq, Syria and Palestine. In the case of Iraq the mandate was in the form of a resolution of the Council, which accepted the terms of the "treaty of alliance" between Great Britain and Iraq together with certain undertakings by Great Britain in connection therewith, as giving effect to article 22.

The British government announced on November 4, 1929, that it proposed to "recommend Iraq for admission to membership of the League of Nations in 1932," thus terminating the mandate and completing the self-determination of that state. This gave the Council an opportunity to define the conditions which justify the presumption that a mandated territory is ready for independence. The Permanent Mandates Commission found that these conditions had been met by Iraq and on October 3, 1932, by vote of the Assembly, Iraq was admitted to the League. According to a resolution of the Council, this terminated the British mandate from that date. France announced at a meeting of the Permanent Mandates Commission in 1931 that "the present progress of evolution points to the termination of the mandate for Syria and the Lebanon at a not very distant date."

Although Palestine is in some respects the most advanced of the areas, there is no immediate prospect of the termination of the mandate, because of the incorporation of the provision for a national home for the Jewish people. This proposal, put forward by Great Britain in the Balfour Declaration of November 2, 1917, and subsequently accepted by most of the Allied Powers, including the United States, contemplates free access to Palestine for Jewish immigrants. It is, however, somewhat difficult to reconcile with the "provisional recognition" of Palestine as an independent nation in view of the vigorous opposition of the Arabs, who constitute three fourths of the population of Palestine. This circumstance has prevented the development of a legislative body for Palestine, since such a body if representative of the population would be dominated by Arabs, who would frustrate the Zionist program.

The B mandated territories are described by the Covenant as "other peoples, especially those of Central Africa, [who] are at such a stage that the mandatory must be responsible for the administration of the territory under conditions which will guarantee freedom of conscience and religion, subject only to the maintenance of public order and morals, the prohibition of abuses such as the slave trade, the arms traffic

and the liquor traffic, and the prevention of the establishment of fortifications or military and naval bases and of military training of the natives for other than police purposes and the defense of territory, and will also secure equal opportunities for the trade and commerce of other members of the League." There has been no talk of immediate self-determination for any of these peoples, although the League has favored indirect administration which will educate the natives in self-government and has hesitated to approve federation of Tanganyika with neighboring British colonies in east Africa.

The territories under C mandate are described in the Covenant as follows: "There are territories, such as Southwest Africa and certain of the south Pacific Islands, which, owing to the sparseness of their population or their small size, or their remoteness from the centers of civilization or their geographical contiguity to the territory of the Mandatory, and other circumstances, can be best administered under the laws of the Mandatory as integral portions of its territory, subject to the safeguards above mentioned in the interests of the indigenous population." The fact that these areas are to be administered "as integral portions of [the mandatory's] territory" and that the open door does not apply on the theory that it is not a safeguard "in the interests of the indigenous population" (a reservation made on the insistence of the British dominions) suggests that the day of their self-determination is remote.

Japan although benefiting by these provisions with respect to her mandated islands of the north Pacific made a reservation against the exclusion of the open door requirement in these areas, and the United States has declined to negotiate treaties recognizing the mandates of the British dominions unless they will apply the open door provision.

The Permanent Mandates Commission, about which the League's supervision centers, has eleven members selected by the Council for their "personal merit and competence," the majority from non-mandatory states. The Commission meets at least twice a year, on which occasions it considers the annual reports of the mandates and cross questions their accredited representatives, who have often been high officials from those areas. The Commission also deals with any petitions that may be presented (through the mandatory) by the inhabitants of mandated territory or (on behalf of those inhabitants) from other quarters. Its recommendations are sub-

mitted to the Council, which usually approves them without modification. The mandatory powers not represented on the Council are entitled to send ad hoc representatives during the consideration of mandates questions by the Council; acceptance of the Council's resolutions on the subject therefore involves acceptance by all the mandatory powers, which thus become bound by the resolution. The Council's resolutions often include general questions concerning mandatory law, policy or procedure as well as recommendations relating to a particular mandated area.

The sanctions of the system, like those of all international law, are primarily the good faith of the nations and the pressure of public opinion; but because of the regularity of supervision, the extensive publicity and the facilities for determining obligations with precision these sanctions are more effective than in some other fields of international law.

Although the Assembly has less responsibility with respect to mandates than does the Council, one of its committees reviews the working of the system and the Assembly regularly discusses the problem at its annual meetings and passes resolutions usually supporting the system against possible encroachment by the mandatories. A section of the League Secretariat devotes itself to mandate problems and keeps the members of the Commission supplied with various sources of information about the areas and the reactions of public opinion toward the system.

Each of the mandates provides that the mandatory must submit to the Permanent Court of International Justice on application of any member of the League any questions relating to the interpretation or application of the mandate.

The Permanent Mandates Commission has felt that its powers were not always adequate to secure the information it needed in its work, but the suggestions that the Commission might be authorized to visit any of the areas, grant an oral hearing to petitioners or greatly elaborate the questionnaire to be answered by the mandatory in its annual report have not been favored by the Council. In practise, however, the Council has sent commissions to both Iraq and Palestine; members of the Permanent Mandates Commission have listened unofficially to the grievances of petitioners, notably on the occasion of the special session at Rome in 1926 in regard to Syria; and the Commission has felt no restriction in the questioning of accredited representatives. The system relies mainly on these practical

devices for assuring information about the areas, publicity and contacts between the administrations and the League authorities. It does constitute probably the most thoroughgoing international supervision of national territorial administration yet devised.

The extent of legal authority of the League over the mandatory is not, however, precisely defined. The Permanent Mandates Commission and the Council have both stated unequivocally that the mandatory is not sovereign of the mandated territory, and this position has been accepted by the mandatories. It has not been decided, however, who is sovereign and the opinions of jurists differ. The League of Nations, the Principal Allied and Associated Powers, the mandated communities themselves and even the mandatories or some combinations of these have all been named as sovereign by different writers; and others have suggested that sovereignty is suspended in the territories for the time being. It seems clear that the Council of the League has authority to remove a mandatory and appoint a new one after a definite breach of the mandate, which presumably only the Permanent Court of International Justice can declare to have occurred. It also appears that the Council decides upon the conditions which justify a mandatory in terminating its mandate on the ground that the community is ripe for independence. Furthermore the Assembly may by a two-thirds vote admit a mandated community to the League and thereby determine that for League purposes the community is "fully self-governing" and therefore no longer subject to mandate. Article 22, like other articles of the Covenant, is subject to amendment by a majority of the members of the League, including all the members of the Council; and thus by a similar process it could be modified or terminated. It seems to be accepted by the Permanent Mandates Commission that the Principal Allied and Associated Powers, in whose favor the territory was originally renounced by the peace treaties and who made the original assignment of mandates, passed out of the picture upon the performance of that function. These considerations suggest that sovereignty of the areas is vested in the League, acting through the Covenant amending process, and is exercised by the mandatory with the consent of the Council for eventual transfer to the mandated communities themselves. This uncertainty of interpretation arises primarily from the fact that article 22 was not carefully drawn by experts but was inserted in the Covenant by

the Council of the Ten, which was actuated largely by political considerations.

The importance of the mandates system lies in its claim to provide methods more adequate than those previously employed for adjusting the relations of the highly industrialized capital exporting communities which have called themselves advanced and of the agricultural capital importing communities which have been called backward. As the quantity of backward territory remaining in the world has declined and the demand for new markets and sources of raw materials by the advanced countries has increased, the methods used for exploiting these areas have become more dangerous to the natives and the rivalries of the advanced states have become a menace to peace. Furthermore with the development of communications, national consciousness and methods of passive resistance among the backward peoples the problem of maintaining order and control in these areas by colonial administration based on military force has become more difficult. The mandate system claims to be an advance in that it subordinates the political and economic interests of the administration to the interests of the inhabitants of the area and of the world as a whole, in that it provides a mass of authoritative data for comparison of administrative methods and for the development of adequate standards of administration and in that it assures continuous disinterested international supervision and publicity, thus minimizing the probability of abuse of power by the administering state.

It is difficult to generalize upon the success of the system in the ten-year period of difficult readjustment in which it has been functioning. Serious disturbances have occurred in Southwest Africa, Syria, Western Samoa and Palestine. In each case the Council of the League has published a detailed report dealing with the facts and responsibilities, and some adjustment has been made as a result of the publicity. Numerous reports of abuses have been investigated and recommendations made by the Council have been acted upon by the mandatory. Observers report that the conditions in mandated areas compare favorably with those in neighboring colonies of similar type; and the meager statistics available indicate that in population growth, health, appropriations for native welfare, trade and investments progress of the mandated territories has been satisfactory. The detailed attention given by the Commission to the vital problems of native land tenure, wages, health and native

participation in the administration has thrown light upon the applicability of recommended standards in the widely diverse conditions represented by the fourteen mandated territories. The experience of Iraq indicates the high probability that a peaceful method for effecting the transition from dependence to independence has been achieved.

The natives of the more backward mandated territories have little organized opinion, and it is difficult to know their attitude toward the system. Nationalist aspirations in the more advanced regions have caused some restiveness, as in the case of the Arabs, who have been disappointed in their hope of immediate independence and feel resentment at the Zionist policy and at the division of their territory between French and British mandates in spite of the desire for union expressed to the King-Crane Commission in 1919. Former German settlers in some of the areas resent the fact that in most cases they have failed to get compensation for their land. The other white settlers, for the most part nationals of the mandatory power, chafe at the limitations imposed by the mandate upon their exploitation of natives and frequently express a desire for annexation of the territory by the mandatory. Several of the mandatories have occasionally manifested a desire to interpret the competence of the League organs in a restrictive manner and to develop the mandated territories as parts of their empires. The vigorous French insistence upon the right to recruit troops for general defensive purposes in its west African mandated territories has also been commented on as hardly in accord with the mandate principle.

In some cases possession of a mandate even without actual sovereignty has been of strategic and economic value to the mandatory. Thus the mandate for Palestine assures Great Britain a foothold on the north bank of the Suez Canal. This will probably be prolonged by the inherent difficulties of the Zionist policy, which is likely to delay the self-determination of this area longer than that of the other A mandated territories. The possession by Great Britain and France of mandates in Iraq and Syria has made it possible for these two nations to control the development of oil resources in the Mosul area and the course of pipe lines to the sea, although the United States succeeded after protracted negotiations in gaining the right for American oil companies to participate in the exploitation of these fields.

In spite of these criticisms and these instances

if material advantage came from the possession of mandates the mandatories have formally exhibited entire good faith and have generally respected the resolutions of the Council in regard to mandates.

Recognizing the inevitable economic advantages which a mandatory will enjoy, no matter how carefully the open door principle is observed, the Permanent Mandates Commission has kept a particularly sharp watch over customs, investments, loans and concessions in mandated territories in order to check any abuse, conscious or unconscious, of the mandatories' advantages.

The opinion of the world has steadily become more favorable to the system, as is evidenced particularly by juristic, historical and humanitarian writers. The system was at first greeted as a thin veil for annexation, especially in the United States, Germany and Soviet Russia, and Communist organs have continued to brand it as the latest expression of imperialistic exploitation. The initial skepticism in the United States has been greatly modified by the study of the actual functioning of the system; and German opinion, particularly since Germany has become a member of the Council and a German has been a member of the Permanent Mandates Commission, has tended to support the system and vigorously to oppose any steps leading toward annexation of the areas or neglect of the principles of the Covenant. Italy as the only Principal Allied Power without a mandate has manifested great interest in the system and her representatives have exerted themselves to maintain its integrity. The Assembly, dominated by non-mandatory states and by states without colonial responsibilities, has been even more anxious than the Council to prevent whittling down the mandate system; and the Commission as a non-political and impartial body has taken its duties seriously and by the care, intelligence and energy of its members has made the League supervision a real force and has added to the stock of human knowledge on the problems of colonial administration.

The question of extending the administrative aspects of the system to other areas is less important than the extension of its principle. That system now embraces typical areas; if more were added, the Commission's administrative duties might swamp its scientific and investigatory functions. Nevertheless, the advantage of League supervision will doubtless be considered if a future political change should convert a colony in the status of a dependency. The League's

major work, however, is to fix its attention on the problems, to stimulate investigation and experiments toward a solution and to see that the mandated areas are administered in the interests of the natives and of the world according to the best available learning and experience, thus setting examples for the administration of backward areas everywhere. In this way it has during its first ten years achieved a large measure of success.

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ward emigrated to England. His most important work, *The Fable of the Bees: or Private Vices Public Benefits*, was one of the most widely read and controverted books of the eighteenth century. Mandeville's thought is scarcely a coherent whole, although it embraces many clearly developed ideas of considerable importance in ethics, psychology and economics. He professes to accept the traditional conception that virtue consists solely in self-denial or the victory of reason over the passions. Hence the paradox of the *Fable*, which assigns to the "vices" of men—their pride, self-interest and desire for material well being—the chief responsibility for the prosperity of modern societies. Mandeville's psychology is egoistic: reason is everywhere the tool of the passions and the passions are rooted in self-love. What passes for unselfishness in human nature is the result of social pressure working upon subtle forms of self-love: "Moral virtues are the political offspring which flattery begot upon pride" (*Fable* I, 51). Significant for the history of economic theory is Mandeville's insight into the importance of self-interest in the economic order. He sees that the satisfaction of the wants of a complex society results from the unwitting cooperation of innumerable individuals each working for his own interest; and he asserts that the proper balance of these interests on which economic well being depends is most likely to be maintained when they are least interfered with by government or charitable agencies. Here he clearly anticipates the basic philosophy of *laissez faire*. Other less important contributions to economic thought are his perception of the logical nexus between self-interest and the division of labor and his defense of luxury. Mandeville's work was well known to Adam Smith and must have influenced the shaping of Smith's economic doctrines. His analysis of human nature was likewise influential, although in a different way. By showing the incompatibility between the orthodox conception of virtue and what he regarded as the springs of human conduct he acted as a powerful stimulus to ethical inquiry; and the later psychological moralists, such as Hume, Adam Smith and Helvétius, even when they do not agree in full with Mandeville's egoistic analysis owe much to the acuteness with which he laid bare the ramifications of self-love.

GLENN R. MORROW

Important works: *The Fable of the Bees* (2 pts., London 1714-29; modern edition by F. B. Kaye, 2 vols., Oxford 1924); *Free Thoughts on Religion, the Church*

and National Happiness (London 1720); *An Inquiry into the Origin of Honour* (London 1732).

Consult: Kaye, F. B., Introduction to his edition of *The Fable*, vol. i; Robertson, J. M., *Pioneer Humanists* (London 1907) 230-70; Sakmann, P., *Bernard de Mandeville* (Freiburg i. Br. 1897); Schatz, A., in *Vierteljahrsschrift für Sozial- und Wirtschaftsgeschichte*, vol. i (1903) 434-80; Lamprecht, S. P., "The Fable of the Bees" in *Journal of Philosophy*, vol. xxiii (1926) 561-79; Morize, André, *L'apologie du luxe au XVIII^e siècle* (Paris 1909).

MANEGOLD OF LAUTENBACH (c. 1060-c. 1103-19), German monk and political theorist. Manegold was born in Germany, at an early age entered the monastery of Lautenbach in Alsace and after the demolition of the monastery by supporters of Henry IV spent some years in wandering until he found refuge at the monastery of Raitenbuch in Bavaria. By 1090 he had returned to Alsace; there he helped to found the monastery of Marbach, of which he was *praepositus* after 1096.

Manegold, whose principal treatise, *Ad Gebehardum* (dedicated to Archbishop Gebhard of Salzburg), was written probably in 1085, was the most incisive of the writers who defended the action of Hildebrand in deposing Henry IV. In so doing he was primarily concerned not with the question of the authority of the spiritual power over the temporal but with the principle that the authority of the secular ruler is derived from the community. Far from holding a low view of the political order Manegold asserts quite dogmatically that it is derived from God. Whatever may have been the attitude of others, Manegold treats the royal authority with the profoundest deference, for its purpose is to maintain justice. He is clear that the function of the temporal power is a moral one. But he draws a sharp distinction between the office and its occupant, refusing to admit that the divine nature of the former involves unlimited power and irremovability on the part of the king (*Ad Gebehardum*, 30, 39, 43). Indeed he emphatically repudiates the doctrine of Gregory the Great that the ruler must always be obeyed. While suggesting the possibility of a different interpretation of Gregory's words Manegold unhesitatingly declares that if the pope really held such a view, he was wrong (45).

His own view is positively set out in the well known passage (30) where he says abruptly that the king who plays the tyrant has forfeited his right to his great office and that the people are free from all obligation to obey him, for he has violated the agreement or contract (*pactum*) by

virtue of which he was appointed. With characteristic plainness of speech he supports this by an analogy with the relation between the swineherd and the man who entrusts his swine to him for a suitable wage. If the swineherd slays or steals the swine, the owner will refuse to pay the wage and will dismiss the swineherd from his service. As far as is at present known, this is the earliest general statement of the theory of a contract or agreement between the people and the ruler, which finds its classical expression in the Declaration of Rights in the English Revolution of 1688. But Manegold is only putting into precise phrase a conception which is implicit in the conditions of coronation as early as the ninth century and is the fundamental principle in the feudal relation of lord and vassal. Manegold's words represent the normal conception of the Middle Ages, the crystallization of a whole movement of political principles and conditions into one great phrase.

A. J. CARLYLE

Works: The *Ad Gebehardum Liber* has been ed. by Kuno Francke in the *Monumenta Germaniae Historica*, *Libelli di Lite*, vol. i (Hanover 1891) p. 300-430.

Consult: Carlyle, A. J. and R. W., *A History of Mediaeval Political Theory in the West*, 5 vols. (Edinburgh 1903-28) vols. iii-iv; Poole, R. L., *Illustrations of the History of Medieval Thought and Learning* (2nd ed. London 1920) p. 203-04; Mirbt, Carl, *Die Publizistik im Zeitalter Gregors VII.* (Leipzig 1894); Stead, M. T., "Manegold of Lautenbach" in *English Historical Review*, vol. xxix (1914) 1-15.

MANGOLDT, HANS KARL EMIL VON (1824-68), German economist. Mangoldt was *Privatdozent* at the University of Göttingen in 1855 and in 1862 he was appointed professor of economics at the University of Freiburg. Mangoldt's significance lies in the fact that in the period from 1855 to 1868, when the historical school of economics was exercising a predominating influence in Germany, he kept alive the interest in theoretical economics and, in a series of important books, furthered the systematic treatment of economic theory. His general approach was that already followed by Hermann; that is, with all his high regard for the importance of classical economics he examined its doctrines in the light of economic reality and modified them accordingly. Mangoldt's doctrines exercised considerable influence especially on the theories of rent and profit. He was the first in Germany to point out that rent is in no way a special phenomenon confined to agriculture and mining but an element of income which may ac-

crue to any factor of production whenever the latter enjoys a particular advantage in the market. Marshall later readopted this line of reasoning, although with more cautious formulation. He distinguished sharply between profit and interest and regarded the former as a payment for risk and entrepreneurial ability, thus constituting an independent category of income. Mangoldt was among the first to use the graphic method in illustrating the process of price determination; notable too is his use, although in somewhat obscured terms, of the concept of elasticity of supply and demand in the theory of international trade.

KARL DIEHL

Chief works: *Die Lehre vom Unternehmerrgewinn* (Leipzig 1855); *Grundriss der Volkswirtschaftslehre* (Stuttgart 1863; 2nd rev. ed. by F. Kleinwächter, 1872); *Volkswirtschaftslehre* (Stuttgart 1868).

MANIN, DANIELE (1804-57), Italian statesman. A liberal in politics and economics, Manin promoted the enthusiastic welcome tendered by Venice to Richard Cobden on his visit in 1847. Before 1848 he favored legal resistance to Austrian oppression in Lombardy-Venetia, but after the outbreak of the revolution he headed the provisional republican government of Venice. In 1849 he maintained the military campaign against Austria at a high pitch, ruling the republic with dictatorial powers throughout the struggle. After the fall of Venice in August, 1849, he fled to Paris, where he passed his last years in poverty as a teacher of Italian.

During his exile he adopted monarchist views, advocating Italian unification under the house of Savoy, which had inaugurated in Piedmont a sound liberal and national policy. The change in Manin's views involved him in heated controversy with Mazzini. He exerted an extremely important influence in the reorientation of the national movement. Garibaldi and other illustrious republican patriots followed Manin, who became the first president of the *Società Nazionale*. His work in the successful liberation struggle which began in 1859 was of inestimable value.

PIETRO SILVA

Consult: Trevelyan, G. M., *Manin and the Venetian Revolution of 1848* (London 1923); Errera, Alberto, *Daniele Manin e Venezia 1804-53* (Florence 1875).

MANN, HORACE (1796-1859), American educator. Mann was born in Massachusetts and educated in district schools and at Brown Uni-

versity, where he taught for two years. He then took up law and entered politics, sitting in the Massachusetts legislature from 1827 to 1836 and in Congress from 1848 to 1853. He was early interested in social reform; he sponsored legislation against intemperance and gambling and for state care of the insane. Mann was directly responsible for the act creating the state Board of Education and served as the board's first secretary from 1837 to 1848, in which capacity he was responsible for the twelve volumes of its annual reports. Impressed by the need of competent teachers in public schools, he championed the movement for normal schools; and it was as a result of his efforts that the first normal school was opened at Lexington in 1839, financed in part by the state and in part by Mann's friend Edwin Dwight of Boston. In 1843 the legislature passed resolutions advocated by Mann providing for the support of normal schools and school district libraries. Mann founded and edited the *Common School Journal* from 1838 to 1848. From 1852 until his death he served as the first president of Antioch College.

Mann emphasized what are regarded as essentials by modern educators: that the first condition of education is health; that school reform is always schoolmaster reform; that training rather than instruction is the true method; that the development of mind and character by a wholesome moral training and what is today called mental hygiene is the aim of true education; that instead of competition the spirit of cooperation and democratic ideals should be developed by the public schools; that a method which makes good schools but bad pupils is folly.

A disciple of Combe and a phrenologist, Mann was strong in logic but weak in psychology. Although in a conflict with conservatives which demanded agility and cleverness he was impeded by a ponderous rhetoric he had great influence through lectures and writings. He was a great teacher who did significant work in improving public school education, and his great service for the training of teachers is likely to be recognized as his permanent contribution to social progress.

WILLIAM H. BURNHAM

Works: Life and Works, ed. by George C. Mann, 5 vols. (Boston 1891).

Consult: Mann, B. Pickman, "Bibliography of Horace Mann" in United States, Bureau of Education, *Report of the Commissioner, 1895-1896*, vol. i (Washington 1897) p. 897-927; Burnham, W. H., in *School and Society*, vol. xiv (1921) 109-15; Hubbell, G. A., *Horace Mann, Educator, Patriot and Reformer*

(Philadelphia 1910); Martin, George Henry, *The Evolution of the Massachusetts Public School System* (New York 1894).

MANNING, HENRY EDWARD (1808-92), English cardinal and social reformer. Manning, an Anglican pastor from 1832, became affiliated with the High Church movement and in 1851, six years after Newman's secession, was converted to Catholicism. In 1865 he was appointed archbishop of Westminster. Manning's main contribution to the Catholic revival was his social work undertaken in accordance with his deliberate policy of reawakening the Catholic masses in England. Consisting chiefly of poor Irish immigrants in the industrial cities and seaports, the masses had been generally out of sympathy with the previous church leaders, who were mostly drawn from a few aristocratic families.

As a result of his experience with the immigrants, particularly in his work of establishing and maintaining Catholic schools, Manning became a passionate crusader against intemperance. One of the foremost advocates of temperance in England, he founded the League of the Cross to promote the cause and organized it throughout the country with great success. His constant endeavors to assist the poor won him the sympathy of social reformers who were strongly prejudiced against the church and greatly increased Catholic influence in England. In 1884 he sat with the prince of Wales in the Royal Commission on the Housing of the Working Classes. In spite of much criticism from other Catholics he cooperated in the social reform activities of such religious movements as the Salvation Army and openly supported W. T. Stead when the latter was imprisoned in 1885 for his sensational exposure of the white slave traffic. As Anglican archdeacon before 1851, he had done much work among agricultural laborers and during the 1870's he gave powerful support to the Agricultural Labourers' Union. His lecture "The Rights and Dignity of Labour" brought him into close touch with the younger labor leaders who were organizing the dockers and other unskilled workers. During the London dock strike of 1889 his letters in support of the dockers induced them to solicit his mediation; the final settlement of the strike was due entirely to his efforts. Manning was successful in emancipating the English church from the domination of the conservative landowners. According to his own statement he learned his radical politics from "Moses and St. Paul" and had "compassion on the multitude because they have nothing to eat."

He became closely associated with the similar activities of Cardinal Gibbons in America and together with him had a direct influence upon Pope Leo XIII's encyclical of 1891 on the condition of the working classes, which laid down the program of modern Catholic social reform. This encyclical fully endorsed Manning's championship of the trade unions and his demands for the regulation of female and child labor, for shorter working hours, for public relief in times of distress and unemployment and for state interference to enforce justice in economic relations. Like Leo XIII, Manning condemned socialism as a denial of the right of private ownership, insisting that true social reform lay in a better distribution of property.

DENIS GWYNN

Works: Some of Manning's writings and lectures on non-religious subjects are collected in *Miscellanies*, 3 vols. (London 1877-88).

Consult: Hutton, A. W., *Cardinal Manning* (London 1892); Purcell, E. S., *Life of Cardinal Manning*, 2 vols. (London 1895); Leslie, Shane, *Henry Edward Manning* (London 1921); Lemire, Jules, *Le cardinal Manning et son action sociale* (Paris 1893); Bodley, John E. C., *Cardinal Manning . . . Three Essays* (London 1912) p. 1-65; Smith, H. L., and Nash, V., *The Story of the Dockers' Strike* (London 1889); McEntee, G. P., *The Social Catholic Movement in Great Britain* (New York 1927).

MANORIAL SYSTEM. The manorial system was a type of economic, social and administrative organization based on land tenure, which bound together in a nexus of interdependent relationships the landowning class and the land tilling peasants. At the same time it represented a unit responsible for performance of political and communal obligations. The nucleus of the organization was the manor, to which were attached a number of dependent peasant holdings. The lord reserved for his own immediate use what as a rule amounted to only a small section of his total land, the remainder being parceled out among the peasants in return for services and dues which were applied to the maintenance of the lord or to the upkeep of the manor. The economic activities of the manor in its wider reaches comprised work in the fields, in the meadows, in the pastures and in the forests; gardening, wine growing, beekeeping and fishing; and in addition conversion of the various natural products into usable commodities. Thus the requirements not only of the lord's household but of the smaller units were practically always guaranteed; and favorable conditions might result in a surplus.

To an age of economic decentralization and barter economy the manorial system was well adapted. Despite the occasional opportunities for trading with the outside world the manor was essentially a self-sufficing unit in which the requisite economic goods were produced within a more or less extended domain of interconnected agricultural enterprises. From a political point of view as well the manorial technique proved itself particularly useful in defending the country, in administering and executing justice, in raising taxes and in the other problems of administration which beset a highly localized and decentralized political system. Thus the institution of the manor becomes in a very real sense the reflection of feudalism in its period of expansion during the early Middle Ages and later during its period of gradual decline.

With the passing of antiquity the manorial system established itself throughout wide areas of Europe, contributing to the progress of agriculture and to the regulation of social life. The germs of manorial organization are discernible in the typical late Roman *latifundia*, the nucleus of which consisted of consolidated areas of cultivation worked by slaves and grouped around a central villa. On condition that he continue to contribute his services to the estate the slave might be granted a separate house and a certain amount of land, thus becoming a *servus casatus*, while the small free tenant (*colonus*) might be allowed to rent a parcel of ground, sometimes with premises. The settlement of moderate size which thus arose around the villas did not, however, constitute in Roman law an actual village community (*universitas*), for which definite limits were prescribed. Under the empire the colonate came to fill an increasingly significant function, especially upon the adoption by the government of the program of fostering internal colonization as a means of revitalizing the native strain. The owners of the large estates were charged also with the administration of taxes and justice; and after the legislation of Constantine, which converted free payers of land taxes into *glebae adscripti* bound to the soil, the power of the great landowners steadily increased, until by the end of the Roman period they exercised control over both consolidated and scattered domains. The deep influence of these two types of manorial organization is repeatedly revealed during the early Middle Ages in Italy, Gaul, Spain, southern Britain and along the Rhine. In spite of the violent disruption of property caused by the northern invasions the economic forms of the

Roman agrarian system displayed striking powers of persistence. The same lines of evolution are traceable in the Eastern Byzantine Empire, although certain of the emperors friendly to the peasants—such as Heraclius and Leo III, the creator of peasant rights—attempted on occasion to protect the free farming population that was liable to military service.

At the same time it is apparent that a deep influence was exerted on the mediaeval agrarian system by the migrations of the Germanic tribes, however greatly hypotheses may vary as to the type of land tenure obtaining among these tribes. Certain scholars of a former generation, notably such German legal and economic historians as G. von Maurer, H. Brunner and A. Meitzen, maintained that the essential features of the Germanic system of land tenure were the free mark association (*Markgenossenschaft*) and the village community (*Dorfgemeinde*) and that the manor was the outgrowth of a later development which took place only after the final period of tribal consolidation. Other scholars, particularly Denman Ross, Seeböhm and Fustel de Coulanges, have insisted that the manorial system derived from conditions prevailing during the late Roman period. R. Hildebrand maintained that the origins of the system were contemporary with the primitive transition to agriculture, while the careful researches of Dopsch would likewise indicate that its origins are to be sought already in the early Germanic period. But even if it is true that the Germanic tribe possessed colonized slaves resembling the Roman *coloni*, it is nevertheless difficult to prove that these tribes had a well developed organization comparable with the manorial institution. The most convincing hypothesis perhaps is that the institution of the manor combined elements deriving from late Roman days, particularly the well organized system of the large estate, with the more vigorous forms of corporate activity characteristic of the Germans.

It was in early mediaeval England that the essential characteristics of the manorial system first became clearly isolated. Intimately connected with the village community, the English manor revealed the influence of Germanic (Anglo-Saxon) rural organization. The manorial arrangement proved itself the most convenient device for organizing large estates such as crown and church lands or the possessions of the nobility. Very frequently the manor was held as a feudal estate by a thane (*thegn*), a knightly retainer of the king. Although English manors

manifested a wide variation as to both size and method of administration, a composite sketch may be attempted. The lord's residence, fortified and surrounded by ditches, stood in the center of a village laid out according to plan and situated near a road or crossroads. The servants—or in the earlier period slaves—lived on the estate, while in the village were located the houses and farm buildings of the peasants and the other dependents who occupied a more humble legal and economic status in the prevailing hierarchy. The freemen (*socmen* or *geneats*) are thought to have been originally free, tax (*gafol*) paying peasants, who assumed a status of dependency by committing their personal protection to the lord and by surrendering to him the prerogatives of taxation and judicial administration. Below the *socmen* in the hierarchy were other peasants (*geburs*, *villeins*) more heavily burdened with obligations, especially with labor dues. The differences between these social groups gradually disappeared, the designation *villagers* (*villeins*) coming to be applied to all indiscriminately. Beneath the peasants there were also cotters (*cotsetlas*), who possessed nothing more than a house and a small piece of land.

The manor and the village had at their disposal a broad expanse of land—arable fields, meadows, pastures and forests—as well as springs, streams and lakes. The arable land was cultivated on the open field system; the individual holdings were unseparated and unfenced. The land of the lord (*demesne*), which usually contained between 300 and 400 acres, was made up as a rule of large block shaped tracts, although occasionally his parcels were scattered among those of the peasants. The cultivated land of the villagers was cut up into a number of sections (*furlongs*), which were in turn subdivided into strips. The individual peasant owned a number of narrow strips which were widely scattered over the whole area. The unit of measurement was an acre, made up of strips of a definite width, usually 4 rods. Originally the share of land seems to have consisted of 120 acres, or a *hide*, which was later reduced to a quarter of a *hide*. The *hide*, composed of strips 4 yards wide, was apparently calculated for tillage with eight draft animals, while the *yardland* (*virgate*), with its 1-yard strips, was designed for a double team of oxen; within a short time, however, forms of land tenure began to deviate in numerous ways from this norm. The arable land was cultivated on a three-field system: one part of the fields was assigned to summer crops, another to winter crops, while a third

part was left fallow. Since the separate strips were not immediately adjacent to the farmyards, it became necessary to introduce joint responsibility for work in the fields (joint labor). If at the outset this regime guaranteed a uniform distribution of labor by forcing the idle to share in the production, it tended to become in the course of time a barrier to economic progress. Pastures and forests were regarded as common (*gemeen*) lands and were under the control of the community. The former were used in common, while the use of the latter—as, for example, in the gathering of wood—might be left to the discrimination of individual villagers. Beekeeping and fishing also were originally communal enterprises. The lords, however, reserved special rights for themselves, such as hunting, and after the arrival of the Normans they acquired sovereign rights over all the lands. The peasants were obliged to render dues in kind and sometimes in money and to perform services. Labor services being indispensable to the upkeep of the manor became obligatory even on villagers who had originally been freemen. In addition to furnishing labor and teams for tilling and transportation and rendering various kinds of assistance on certain set days and weeks, the peasant found himself increasingly liable to emergency requisitions arising oftentimes from the whim of the lord as well as to special taxes in the event of a death or a marriage. There were also within the manor shepherds, fishermen, beemasters, blacksmiths, joiners and cloth makers. With the gradual disappearance of many of his privileges the lot of the peasant became an increasingly unenviable one.

Since the manor constituted a convenient administrative unit, it served well the purposes of the state. Apart from the payment of general taxes and the fulfilment of special obligations it was called upon for the *trinoda necessitas*, i.e. the building of roads and bridges, the proper maintenance of castles and military and naval contributions in money or men. Being charged in addition with the administration of justice (sake and soke), it set up courts which dealt with manorial affairs, in accordance with customary law (customals), and dealt also with cases of public law.

The manorial system reached the peak of its development in England during the period of the Norman Conquest, revealing those characteristic forms which are preserved so clearly in the *Domesday Book*. Thereafter it gradually lost its economic and political significance. Although

the beginnings of this system in Ireland and Wales may be traced to the tribal period, it did not take a clearly defined shape in these countries until their conquest by the English.

The development of the manorial system in France (*régime domanial*) was strikingly systematic, especially in the northeast and in the adjacent southern Netherlands. In Normandy and Bretagne, however, as well as in the south the development was less complete and displayed numerous deviations from a strictly logical norm. An excellent picture of the French system is presented in the vivid *Capitulare de villis* issued under Charlemagne. The organization of the villeinage was similar to that of the English manors. The power of the lord, however, was greater, as can be seen from the fact that the right of the villagers extended only to the usufruct of the forests and common pastures (*communias*). The estate was managed by a *maire*, who was assisted by *sergents* and *prévôts*. The manor (*court*, *manoir*) was surrounded by the premises of the peasants (*manse*, *meix*, *mès*). Some of the latter were free tenants (*villains francs*) who had to fulfil certain obligations in accordance with customary law (*coutume*), but most of them were serfs, who had to pay personal dues (*taille*, *mainmorte*, *formariage*, *chevage*) and to perform labor services for the manor, as in the fields and mills. For the reclamation of uncultivated lands outsiders, known as guests (*hôtes*), were engaged on somewhat better terms. The lords enjoyed legal immunity and exerted over their subjects an authority which applied to both persons and property. More important still they exercised a jurisdiction over adjacent areas extending beyond the original limits of the manor. In this way a system of territorial organization was evolved, composed of seigniories whose inhabitants not only were subject to the sovereign rule of the lords but also were burdened with dues and services. While in southern France peasants enjoyed great leeway, in the northeast there came to prevail the principle *nulle terre sans seigneur*.

Early mediaeval Italy likewise possessed a clearly defined manorial technique. The typical Italian manor was surrounded by holdings of free peasants (*manentes*, *massarii*), who enjoyed various rights, as well as by lands that were held on leases (*libelli*). The fact, however, that the Italian cities, which since the Roman period had been aggressive in the defense of their privileges, became the dynamic force in the economic and political life of mediaeval Italy caused the system of land tenure to assume more liberal forms

as regards the system of rent, free leasing and particularly free labor. Similar conditions obtained in early mediaeval Spain. At a later period, however, differences began to appear between northern Spain, which preserved its manorial institutions, and the southern provinces, which under the yoke of Moslem rule witnessed the virtual abolition of the manor.

In Germany the manorial system expressed itself in two forms, which differed as regards both their economic organization and administration and their relationship with the agrarian communities. As a rule the crown and church lands and the large secular possessions were scattered over wide areas, as were also the smaller estates. The manorial system (*Fronhofsverfassung, Villikation*) seems to have constituted during the early Middle Ages the most important form of agrarian organization. Surrounded by closely grouped peasant farms (*Mansi, Hufen*), the manor (*Salhof*), restricted oftentimes to a few *Hufen* of acreage, formed a center of economic activity which embraced the various branches of agriculture, forestry and manual trades. In the looser form of manorial organization, which existed, particularly in northwestern Germany, side by side with this more familiar type, small independent holdings were likewise frequent; but the role of the manor was essentially different, being little more than a center for collecting dues. In the more familiar type the manorial association (*Hofgenossenschaft, familia*) was divided into social groups: free tenants, full serfs and servants; but gradually these differences were replaced by a common legal system (*Hofrecht*), in which the members constituted an organic unity, although differences of possessions and obligations continued to be recognized. When the manor controlled several villages (*Dorfgemeinde*) or an entire rural district (*Dorfmark*), it frequently combined for administrative purposes with the village communities, a manorial official (*Meier, Schulze*) serving also as head of the village association (*Dorfgenossenschaft*). The lot of the peasants improved after land rents and labor services had become fixed. With the Hohenstaufens the manorial associations (*Fronhofsverbände*) began to reveal marked symptoms of deterioration, and in the west of Germany the feudal system as a whole began to manifest symptoms of petrification and decay.

In the region east of the Elbe, however, there began to appear shortly after the German recolonization a more intensified and rigorous adaptation of the manorial technique (*Gutsherr-*

schaft), which also manifested itself in the territories which had remained under Slavic rule. This marked recrudescence of the manor is attributable primarily to the increasingly common practise of endowing knightly warriors with colonial estates, which were operated by dependent peasants and cottagers. At first these estates served to supply local needs. Later, however, particularly with the close of the Middle Ages, the rise of cities not only in Germany but also in Holland and England created a tempting market for farm products, especially cereals and wool. Glimpsing the possibilities of large scale production, the lords of the manor purchased or if necessary seized the holdings of the peasants, thus creating large enclosed domains within which they improved agriculture, exerted jurisdiction and levied taxes. Such enterprises (*Gutsherrschaften*) may therefore be said to constitute a continuation of the *Herrengutssystem* of the earlier Middle Ages.

In the Scandinavian countries the agrarian system manifested the characteristics of a peasant culture, although manorial institutions with a system of land renting existed even here. They were less frequent in Norway than in Sweden and Denmark, where villages and land organization resembled the English system.

In the Slavic east agrarian property relationships assumed a distinct form relatively late after the region had come under the influence of the Byzantine and western civilizations. In Poland, where the masses of the agrarian population early found themselves in a state of dependence because of the so-called rights of the princes, the manorial system is known to have existed in the twelfth century and probably originated even earlier. The princes and the noblemen enfeoffed by them had exercised authority over manors. A characteristic institution was the so-called service settlements (*osady slouzhebne*), the name of which indicates the presence of persons serving in specialized capacities, such as clerks, hunters, fishermen and blacksmiths, and seems to suggest a more definite distribution of economic function. It is scarcely to be assumed that the east German colonization contributed immediately to the development of the manorial system (*Herrengutswirtschaft*) in Poland, inasmuch as the villages, settled in accordance with German law, were composed chiefly of peasants. But it is not unlikely that noble estates arose at a later period out of the holdings of the leaders of the colonization (*Lokatoren, Schulzen*) or that the lords deliberately acquired such estates as a

step toward the development of a manorial system. In any case the *Gutsherrschaft* was widespread in both Poland and Lithuania.

In the agrarian system of Russia, which developed under the influence of the Varangians and of the great cities Kiev and Novgorod, a sharp differentiation must be drawn between the white land, on which were located the great estates of the princes, boyars and monasteries, and the black land, held by the large masses of the free rural population. The lords possessed feudal estates (*kormlenie*) as well as widely extended possessions whose economy rested on the payment of dues (*obrok*) and the performance of labor services (*robot*). The situation of the serf (*kholop*) was miserable as compared with that of the obligated tenant (*zakup*). At a later date there are indications of a wide variety of social gradations among tenants. As a rule the manors in Russia were not connected with village settlements. A characteristic institution which began to make its appearance after the sixteenth century was the mir, or village community, with its peculiar system of landownership, according to which the distribution of land was dictated by the numerical size and needs of the family. According to some scholars the mir is an ancient institution, while others connect it with serfdom and derive its origin from the communal liability for taxes.

It is readily apparent that the manorial system and other related forms of land tenure fulfilled a highly useful function from both economic and technological points of view. The more systematic organization of labor and the greater rationalization in management led to an increase in the variety and quantity of production as well as to an improvement in the methods of farming. Not only were opportunities thereby created for greater demand and a more abundant local consumption, but it also became possible to sell agricultural products to the outside world and in this way to prepare the way for an economic development that extended beyond the limits of the village and the manor. In these benefits the peasants likewise shared despite the fact that at the same time they were heavily burdened with obligations which were augmented by exactions on the part of the state and the church. The economic importance of the mediaeval agrarian system declined with the rise of commerce and money economy and the emergence of cities. Manorial obligations began to lose their force; dues were simplified and fixed in the form of rent. The labor services, which in many cases

had become unprofitable, were in the main abolished, being replaced by money payments with which labor was hired. Furthermore a system of free leasing—for a period of years or for life—became common; the heritable lease was likewise resorted to after the manner of the Roman emphyteusis. There ensued a rapid increase in the number of free small tenants, farm laborers and servants who sold their labor voluntarily. The social consciousness of the rural masses was awakened; the intellectual movement which began during the crusades gained in momentum. In the thirteenth and fourteenth centuries peasant revolts occurred sporadically in both France and England. Germany following local insurrections during the late Middle Ages experienced its great Peasants' War during 1524-25 without, however, undergoing a radical modification of its agrarian system. But a profound transformation of the prevailing system was brought about by general economic changes, which first made themselves deeply manifest in England. The owners of the great English estates responding to the growing demands of an expanding commerce entered upon a period of large scale enclosure, concentrating especially on the conversion of arable land into pasturage. Mediaeval conditions persisted much longer in France and western Germany, while in eastern Europe the manorial system showed remarkable capacity for adapting itself to the demands of agrarian capitalism. Under the aegis of mercantilistic and later of physiocratic doctrines the various European states with an eye to increasing population and state revenues attempted to foster the welfare of the peasants, especially in the matter of land tenure. It became increasingly apparent, however, that efforts at rural reform had little chance of success as long as the older agrarian system was allowed to continue. Effective reform even when undertaken on such a large scale as in England and Denmark seemed to call for the removal of the existing personal obligations of the peasants, the abolition of land dues, the division of communal lands, the elimination of joint labor by fusing the scattered parcels and the reorganization of rural communities. In France this was the work of the Revolution of 1789, in Germany of Stein and Hardenberg in 1807 and the Revolution of 1848, in Russia of Alexander II and his reforming ministers of 1861. Although these various reforms are the expression of a similar spirit, the process of carrying them into execution represents a variety of adjustments to the historically conditioned agrarian patterns of the

different countries, which continue to reflect even to the present the peculiarities of their historical evolution.

RUDOLF KÖTZSCHKE

See: FEUDALISM; SERFDOM; VILLAGE COMMUNITY; COLONATE; LAND TENURE; LANDED ESTATES; ENCLOSURES; AGRARIAN MOVEMENTS; AGRICULTURE.

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MANSFIELD, FIRST EARL OF, WILLIAM MURRAY (1705-93), English judge. Although of Scottish origin Mansfield secured recognition as the leading figure of the English bar before reaching the age of thirty-five. He was made solicitor general in 1742 and was for the next fourteen years one of the leading figures in parliamentary history. By birth a Jacobite, he was in politics a Tory who nevertheless held moderate views, and he was truly characterized by Macaulay as "the father of modern Toryism, of Toryism modified to suit an order of things in which the House of Commons is the most powerful body in the state." Becoming attorney general in 1754 he was the leader of the House of Commons for two years under the administration of the duke of Newcastle. In 1756 he was appointed chief justice of the King's Bench; he resigned from this office in 1788, passing the last five years of his life in retirement.

Mansfield's career both in politics and on the bench was colored by many dramatic incidents. His decision on some of the important constitutional questions that arose from the activity of John Wilkes brought him into popular disfavor, and he was bitterly attacked by Junius as showing marked leanings toward arbitrary power; he nevertheless pursued the course which he held to be right. His support of the Roman Catholic Relief Act of 1778, dictated by his tolerance, made him obnoxious to the opponents of that measure and in the celebrated anti-Catholic Gordon Riots of 1780 he not only barely escaped serious bodily injury but also suffered the destruction of his house by fire.

Mansfield's chief title to fame rests on his judicial career. As a judge in criminal cases he earned a reputation for fairness and impartiality, but it was his work in commercial law which won him recognition as one of the greatest of English judges. Lord Holt, who fully appreciated the importance of molding the principles of the common law to meet the new conditions of commercial life, had already prepared the way for Lord Mansfield; but it was the latter with his remarkable knowledge of foreign legal systems who settled the principles of English commercial law on their modern bases. Indeed he practically remade the law relating to shipping, insurance and other commercial transactions; and by basing "quasi-contractual obligations" on the broad grounds of natural justice and *aequum et bonum*, as opposed to the earlier theory of a fictitious contract, he contributed much to the placing of that branch of the law on its modern founda-

tions. It was in fact by him that rules which previously as part of mercantile custom had bound only those who had been proved to be merchants were woven into the common law of England.

Great as was Mansfield's achievement in finally incorporating the law merchant in the English common law system, it had one serious defect; in his desire so to mold the common law as to meet modern conditions he was led to usurp in important particulars the function of the Parliament. Like many other men of his time he held firmly to the idea that the eighteenth century was the most enlightened age in English history. Since the earlier precedents of English law came in his judgment from a barbarous age, he felt it necessary to disregard or remold some of them; and it was this same position again that caused him to seek to do away with the long standing historical separation between law and equity by giving full recognition to equitable as well as legal rights in the courts of common law. Influenced by the canonists' conception of *causa* and the Chancery notion of consideration, he introduced in common law cases the principle that moral obligation was a consideration which would support and make binding a contractual promise; and viewing consideration as purely evidentiary he held that a promise embodied in any writing, even though not under seal, was enforceable. But although these and indeed most of Mansfield's innovations were rejected by later judges as incompatible with the processes of legal development by judicial precedent, it is a striking testimony to his remarkable foresight as a legal reformer that some of his heretical doctrines were incorporated in the law at a later time by means of parliamentary acts. The Judicature Acts by fusing the courts of law and equity finally gave expression to his idea of recognizing equitable rights in a court of law. His work in reforming various parts of common law jurisdiction fails to equal his achievements in commercial cases only by virtue of the truly remarkable character of the latter.

H. D. HAZELTINE

Consult: Holliday, John, *The Life of William, Late Earl of Mansfield* (London 1797); Campbell, John, *The Lives of the Chief Justices*, 4 vols. (3rd ed. London 1874) vol. iii, ch. xxx, vol. iv, ch. xl; Postgate, R. W., *That Devil Wilkes* (New York 1929); Birkenhead, Earl of (F. E. Smith), *Fourteen English Judges* (London 1926) p. 168-96; Macdonnell, John, Introduction in Smith, J. W., *A Compendium of Mercantile Law* (13th ed. by H. C. Gutteridge and others, London 1931) p. ccvii-ccxxvi; Holdsworth, W. S., *A History of*

English Law, 10 vols. (3rd ed. London 1922-32) vols. vi-ix; Winfield, P. H., *The Province of the Law of Tort* (Cambridge, Eng. 1931) ch. vii, discussing Mansfield's contribution to quasi-contract.

MANU, CODE OF. *See* LAW, section on HINDU LAW.

MANUAL TRAINING. For over three hundred years leading educators in various countries have considered and worked toward the methods of teaching and the content of instruction which are known today as manual training, or industrial arts education. Among the earliest of these educational pioneers was Comenius (1592-1670). The educational practise of his day and of many later years was characterized by instruction which was almost exclusively bookish, but Comenius contended that doing and thinking should be combined. During the next century Rousseau carried forward much of the same thought about the need for learning through actual participation instead of by merely talking about things. In turn Rousseau's teachings struck a responsive chord in Pestalozzi, who had a great influence upon educational theory and practise and particularly upon such of its forms as have been called manual training, and in Fröbel, whose belief in the educational value of handwork also attracted wide attention. The specific prototype of manual training, however, was a form of instruction through craftsmanship which was introduced by Uno Cygnaeus into the elementary rural schools of Finland in 1866 and which subsequently had a great influence in Sweden.

In Sweden the sloyd system of handwork originated as an economic movement to protect domestic industry against factory competition, but it was soon adapted to educational purposes. In 1875 a sloyd training school for teachers was founded at Nääs by August Abrahamson and was conducted with marked success by his nephew Otto Salomon. The school soon had an international reputation and its influence extended to all parts of the world. Sloyd in Scandinavian countries involved the use of paper, cardboard, straw, willow, wood and iron. The courses of instruction were based upon a progressively arranged series of projects selected with due regard to prevailing home industries and everyday family needs. The objectives set forth by Salomon included the development of respect and love for work; of habits which make for order, exactness, cleanliness and neatness; and of independence and self-reliance. He advo-

cated work on useful, complete articles or projects and not merely on parts of articles or exercises; his instruction was based on educational principles; he showed that trained teachers gave better results than craftsmen without a professional background; and he coordinated the teaching of mechanical drawing and shop practise, as is done in progressive schools today. Despite its many desirable features sloyd never gained general recognition in the United States, probably partly because of the differences in interests, needs and modes of living which obtained there as compared with Sweden; but it did have a manifest influence on the later development of manual training in the United States.

About the same time that sloyd was being placed on an educational basis in Sweden, Victor Della-Vos at the Imperial Technical School in Moscow was experimenting with methods of teaching shop work. In 1868 he conceived the idea that workshop operations could be reduced to a series of logically arranged exercises. This system would facilitate teaching, would be more economical of material than the former apprenticeship system and would, he thought, contain the chief elements of the craftsmanship training which is required for all trades. An exhibit of these exercises, made in wood and metal, was shown at the Centennial Exposition in Philadelphia in 1876, where it attracted wide attention. Calvin M. Woodward, who was dean of the Polytechnic School of Washington University in St. Louis, John D. Runkle, who was president of the Massachusetts Institute of Technology, and other educators were highly impressed with the Russian system and became the pioneers of manual training in the United States. Industrial drawing had been introduced into the public elementary schools of Massachusetts in 1870. During the same year the University of Illinois independently of Salomon and Della-Vos had opened wood and ironworking shops in connection with courses in architecture and mechanical engineering. Stevens Institute in Hoboken, New Jersey, had equipped a series of shops and Washington University had started a shop for engineering students in 1872. Between the years 1883 and 1898 over one hundred manual training centers were established in the public schools of the United States.

Manual training in the United States was influenced by both the models of sloyd and the exercises of the Russian system. The country was in a stage of rapid industrial development and the consequent inventions, discoveries and

technological changes were making it necessary even as in the present day for workers to readjust themselves vocationally. Many educators of the late 1880's and the 1890's thought that the general exercises of the Russian system would go far toward solving their problems. On the one hand, there were men like Runkle and Woodward who believed that manual training should be regarded as a part of general education; on the other hand, there were many who thought that manual training would help to supply the existing shortage of skilled craftsmen. Some favored it as a means of vitalizing the rest of the curriculum, whereas others looked upon manual training as deserving coordinate rank with other aspects of general education. In those pioneer days the teachers were either skilled craftsmen selected from the trade or men with engineering training. In neither case were they trained professionally.

During the last forty years and more particularly during the last two decades, rapid changes have taken place in the field of manual training. The very term is now almost obsolete in some sections of the United States and other terms are substituted, such as manual arts, mechanic arts, practical arts and industrial arts, which have somewhat synonymous although not identical meanings. The term practical arts is broad and inclusive, covering industrial, agricultural, home making and commercial arts education, much as vocational education includes trade or occupational training in these four major fields. Industrial arts, which is probably the most desirable term, stands for a modernized, broadened, enriched, professionalized and socialized manual training. It is as different in theory and practise from the old style manual training as are modern junior high school theory and practise from the traditional system of twenty years ago. Manual training emphasized what the word implies—manual work and habit formation controlled by a disciplinary conception of education—whereas industrial arts stresses mental and social development and the learning content involved. Manual training called for teacher developed assignments, whereas industrial arts calls for purpose, plan, execution and judgment on the part of the pupils under the guidance of the teacher. Industrial arts is distinctly a part of general as distinguished from vocational education. Neither manual training nor industrial arts has ever functioned effectively as trade education.

Industrial arts education should be thought

as a phase of general education starting from the first grade and continuing through the high school. The specific objective of elementary industrial arts is to introduce the child to the major fields of industrial arts activities, which center around such problems as food, clothing, shelter, utensils and tools and machines. In the junior high school exploratory and guidance values are among the most important. Most progressive school districts require industrial arts in the junior and make it elective in the senior high school.

Among the teacher training institutions which have molded public opinion and have strongly influenced the quality and content of industrial arts education Teachers College of Columbia University deserves a foremost place. Under the leadership of James E. Russell and of his son William F. Russell and through the philosophy and instruction of the late Frederick G. Bonser, Teachers College has profoundly affected industrial arts educational practise in many countries.

Manual training, or industrial arts instruction, in other countries reflects the progress that has been made since the beginning of the twentieth century in educational theory. In France industrial arts education is given in close correlation with drawing, mathematics and other school subjects. France feels that cultural education is very important and teaches industrial arts from that standpoint. In Germany post-war educational reforms are stressing the full development of individual powers as distinguished from the overemphasis of unapplied knowledge. The *Jugendbewegung*, or youth movement, illustrates this point. German industrial arts education is sponsored in large part by private organizations; it is generally recognized as an important element in developing artistic appreciation and furthering creative art and superior craftsmanship. England has likewise learned that instruction in the industrial arts is essential to a well balanced program of general education and is giving increased attention to it, feeling that mass production is not wanted in its schools and that education—including industrial arts education—should always remain in the realm of the teachers who are artists and craftsmen.

F. THEODORE STRUCK

See: EDUCATION; INDUSTRIAL EDUCATION; VOCATIONAL EDUCATION; PRESCHOOL EDUCATION; VOCATIONAL GUIDANCE; HOME ECONOMICS; HANDICRAFT.

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(Peoria, Ill. 1926); Anderson, Lewis F., *History of Manual and Industrial School Education* (New York 1926); Struck, F. Theodore, *Foundations of Industrial Education* (New York 1930) ch. lii; Glass, Frederick J., *The Industrial Arts, Their History, Development and Practice as Educational Factors* (London 1927); Burger, Eduard, *Arbeitspädagogik, Geschichte, Kritik, Wegweisung* (Leipsic 1914).

MANUILOV, ALEXANDR APOLLONOVICH (1861-1929), Russian economist and educator. Manuilov was professor of economics at the University of Moscow. When the Russian universities were granted the right of self-government in 1905 he was elected pro-rector and later rector of the university. His devotion to the cause of freedom of higher education and his opposition to the reactionary policy of the czarist regime toward the student body won him the recognition of the educated classes in Russia. In 1911 Manuilov resigned from his post in protest against the recurring interferences of the government in matters of academic freedom. After his resignation, which was followed by a wholesale exodus of the faculty, he occupied the chair of economics at the Moscow Institute of Commerce and was editor of the section on economics in the new Brockhaus-Efron encyclopaedia. As a frequent contributor to and for a time editor in chief of *Russkiya vedomosti*, the foremost academic liberal publication in prerevolutionary Russia, he was guided in his policies by broad democratic principles rather than by adherence to any single party program; his fair treatment of the labor movement earned him the esteem of labor leaders.

Manuilov's scientific interests were in the field of land tenure, agrarian reform and monetary theory. His *Arenda zemli v Irlandii* (Land tenancy in Ireland, Moscow 1895), in which he analyzed the Land Law Act of 1881 and the Land Purchase Acts in Ireland, is still considered the standard work on the subject; it exerted considerable influence on the pre-war Russian agrarian policy of breaking up communal holdings and encouraging small peasant proprietorship. In his monetary theory Manuilov shared to a large extent the views of Zimmer, Wagner and Helfferich. Although he was much attracted by G. F. Knapp's theory he did not accept Knapp's conception of money as a mere medium of circulation but held that the function of money is to serve as a measure of value as well. His course of lectures on money was published in Moscow in 1918 as *Uchenie o den'gakh*; the section which deals with the currency problems in Russia can

by no means be ignored by any student of Russian economics.

S. P. TURIN

Other important works: "Zametki ob obshchinnam zemlevladienii" (Notes on communal ownership) in *Ocherki po krest'yanskomu voprosu* (Essays on the peasant problem), ed. by A. A. Manuilov, 2 vols. (Moscow 1904-05) vol. i, p. 256-85.

MANUMISSION. See SLAVERY.

MANZONI, ALESSANDRO (1785-1873), Italian poet, novelist and patriot. In his youth Manzoni, a grandson of Cesare Beccaria, came under the influence of Vincenzo Cuoco and Francesco Lomonaco, both of whom had been exiled from Naples after the fall of the Parthenopean Republic and had taken refuge in Milan. All the subsequent political activity and ideas of the great writer were in accord with the conception of Italian unity and independence held and agitated for by these two thinkers. After the conclusion of the period of Napoleonic domination in 1814 he voiced these sentiments in a number of poems which reverberated throughout Italy. His *Liberi non saremo se non siamo uni*, the first lyric of the Risorgimento, was written in 1815 in support of the proposal made by Joachim Murat, king of Naples, that the Italians unite in a single powerful kingdom under Joachim's rule. Manzoni's most ardent patriotic poem was *Marzo 1821*. Evoked by the revolution of the Piedmontese Carbonari in 1821 and dedicated to the German poet-patriot Theodor Körner, this ode prophesied the erasure of all boundaries between the Italian states and the expulsion of the foreigners, who had failed to fulfil their pledges of liberating Italy. Although most of his life was passed in retirement Manzoni emerged on various occasions to take an active part in the struggle for independence and unification and in 1859 he could justly declare that he and Mazzini were among the oldest agitators for the cause. In the posthumously published *La rivoluzione francese del 1789 e la rivoluzione italiana del 1859* he presented a criticism on ethical and legal grounds of the former and a complete justification of the latter.

In addition to the direct influence of his patriotic writings and activities the tremendous popularity enjoyed by some of his more beautiful poems and especially by his immortal romance, *I promessi sposi* (3 vols., Milan 1825-27), made him an important factor in the creation of a moral and intellectual unity among Italians.

I promessi sposi is one of the few works which, like the *Divine Comedy* and the tragedies of Shakespeare, have left an indelible mark on the spirit of a people. Manzoni, who had reacted from the rationalistic influences of his early years and embraced a Catholicism verging on Jansenism, was preoccupied with the moral regeneration of mankind, with the problem of human responsibility for events. As the advocate of human dignity he compares with Dante in the history of Italian culture. *I promessi sposi* has also considerable importance from the historical point of view; the social, economic, political, legal and administrative conditions of seventeenth century Lombardy are portrayed with the intimate knowledge of a researcher and of a man of broad and versatile cultural outlook.

GAETANO MOSCA

Works: *Tutte le opere di Alessandro Manzoni*, ed. by G. Lesca (Florence 1923). His correspondence has been collected in *Carteggio*, ed. by G. Sforza and G. Gallavresi, 2 vols. (Milan 1912-21). A good edition of *I promessi sposi* is that by E. Pistelli (Florence 1930), and a translation appears in the Bohn Library (London 1876).

Consult: Galletti, A., *Alessandro Manzoni, il pensatore e il poeta*, 2 vols. (Milan 1927); Sanctis, F. de, *Manzoni*, ed. by G. Gentile (Bari 1922); Gentile, G., *Dante e Manzoni* (Florence 1923); Ruffini, F., *La vita religiosa di Alessandro Manzoni*, 2 vols. (Bari 1931); Croce, B., *Storia della storiografia italiana*, 2 vols. (2nd ed. Bari 1930); Visconti, A., "Il pensiero storico-giuridico di Alessandro Manzoni nelle sue opere" in *Archivio storico Lombardo*, 5th ser., vol. 7vi (1919) 382-440; Bulle, O., *Die italienische Einheitsidee in ihrer literarischen Entwicklung von Parini bis Manzoni* (Berlin 1893) p. 205-345.

MAQRĪZI TAQI AL-DĪN AḤMAD, AL- (1364-1442), Arab historian. Al-Maqrīzi was born at Cairo and educated in the law by his grandfather, a Hanafite; later he went over to the Shafiites and became a vigorous adversary of the school he had originally supported. After serving as judge and teacher of tradition in Cairo he went in 1408 to Damascus as administrator of the *Wuqūf* and about ten years later returned to Cairo to devote himself entirely to writing. His best known work, *Khiṭaṭ (al-Mawā'iz wa al-I'tibār bi Dhikr al-Khiṭaṭ wa al-Athar*, ed. by Gaston Wiet, vols. i-v, Cairo 1911-27; tr. by U. Bouriant and P. Casanova, vols. i-vi, Cairo 1893-1920), representing for the most part a skilful and scholarly compilation of previous histories, deals with the local history and topography of Egypt. It is not only an invaluable source for history and custom but also contains many penetrating and accurate reflections on

philosophy and political economy. Here al-Maqrīzī discusses customs duties, rights pertaining to dams and their recent modifications, the apportionment and collection of taxes as well as the system of landholding and the situation of the tenantry. He condemns the system of military fiefs by which the Turks benefit and deplors the formation of a class of "pure fellahs," agricultural workers attached to the soil who live under conditions of actual slavery. As supplements to the *Khīṭaṭ*, al-Maqrīzī wrote a history of the Fatimites, *Ittī 'āṣ al-Ḥunafa bi-Akhhbār al-A' imma wa al-Khulafa* (Tübingen 1908), and of the Ajujids and Mamelukes, *Al-Sulūk li-Ma 'rifat Duwal al-Mulūk* (tr. by E. M. Quatremère as *Histoire des sultans mam-louks*, 2 vols., Paris 1837-44). Among his lesser writings, his *Nubdhat al-'Uqūd fi Umūr al-Nuqūd* (ed. by O. G. Tychsen, Rostock 1797; tr. by S. de Sacy, rev. ed. Paris 1797), a treatise on Moslem coins, deserves special mention. Of his projected eighty-volume work on the lives of all the rulers and outstanding figures of Egypt, al-Maqrīzī completed sixteen volumes, four of which are extant in manuscript form.

B. CARRA DE VAUX

Consult: Carra de Vaux, Bernard, *Les penseurs d'Islam*, 5 vols. (Paris 1921-26) vol. i, p. 147-57; Goldziher, Ignacz, *Die Zāhiriten, ihr Lehrsystem und ihre Geschichte* (Leipsic 1884) p. 196-202.

MARAT, JEAN-PAUL (1743-93), journalist and politician of the French Revolution. Marat, a Swiss by birth, studied medicine in France and in 1765 went to live in England, where he wrote tracts on medicine, human nature and parliamentary reform. Returning to France in 1777 as physician to the bodyguard of the count of Artois he turned physicist and attempted to disprove Newton's theories without eliciting what he considered proper recognition from the academies. At the outbreak of the revolution he was steeped in eighteenth century political literature, particularly the writings of Montesquieu and Rousseau; but his composite outlook was on the whole far from radical. His early revolutionary pamphlets, similar in tendency and emphasis to his political writings of the old regime, display a general adherence to limited monarchy and an incidental social concern with the ills of the lower classes and the evils of excess wealth. His rapid evolution into an advocate of the people against the powers in control was no doubt largely occasioned by his progressive disillusionment in the good faith of the latter.

In September, 1789, as a self-appointed monitor of the people he founded the journal *Ami du peuple*. From its inception this journal took its stand on the extreme left, justifying or even helping to instigate every popular demonstration. Upon the king's flight Marat advocated a dictatorship, probably intending himself as dictator. When the monarchical constitution of 1791 was accepted, he reluctantly resigned himself to it in the hope that its defects might be remedied by the radicals of the new legislature. But he soon perceived that their policy made war with Austria inevitable and he resorted again to a plea for a dictatorship. As the war proved increasingly disastrous, Marat began to propose terror as a means of defending the revolution. The popular victory of August 10, 1792, made him a power in Paris. Having been named to the municipal Committee of Surveillance, he became involved in, although not directly responsible for, the prison massacres of September. None whom his journal opposed was chosen to represent Paris in the Convention, to which Marat was himself elected. There and in his *Journal de la République française* he vigorously advocated the execution of Louis XVI. Meanwhile the conservative Girondins attacked the Jacobin group through Marat, since his frank expression of extreme opinions made it easy to marshal the center against him. In April, 1793, they secured a decree sending him before the Revolutionary Tribunal, but the trial, unskillfully managed by the Girondins, resulted not only in his acquittal but also in a popular triumph. Thereafter he commanded the attack upon the Girondins which led finally to the insurrection of June 2 and the arrest of their leaders. Marat's health was now broken by the long periods of hiding and hardship he had endured since 1789, and it was a dying man whom Charlotte Corday assassinated.

As one of the outstanding journalists of the revolution Marat's audience consisted chiefly of the laboring proletariat and the poor of the city. His influence in the Convention and at the Jacobin Club from August 10, 1792, on had its source in his hold over these classes, which was in its turn derived far less from his constructive ideas than from his inflaming power of destructive invective. In his positive program Marat was not a democrat: he always advocated the rule of the few whether through a club, tribunal, dictator or committee. But his constant vigilance for traitors against the interests of the people, his apparent incarnation of the *ami du peuple*,

his perfervid condemnation of social injustice, which, however, stopped short of unreserved equalitarianism, made him an important factor in the arousing of class consciousness in the proletariat. At each successive stage of the revolution Marat was molded by events which others created; but if radicalism was thrust upon him, he became its leading spirit. The dead Marat cast an even heightened spell as a popular martyr and the symbol of lower class revolution, centralization and terror. His remains were interred in the Panthéon in September, 1794, only to be disinterred with the anti-Jacobin demonstrations of February, 1795.

LOUIS GOTTSCHALK

Important works: *Oeuvres*, ed. by A. Vermorel (Paris 1869); *Autobiographie de Marat. Les chaînes de l'esclavage . . .*, ed. by Charles Simond (Paris 1909); *Les pamphlets de Marat*, with an introduction by Charles Vellay (Paris 1911).

Consult: Chevremont, François, *Marat: Index du bibliophile et de l'amateur de peintures, gravures, etc.* (Paris 1876); Gottschalk, Louis, *Jean Paul Marat; a Study in Radicalism* (New York 1927), with full bibliography; Jaurès, J. L., *Histoire socialiste de la Révolution*, ed. by A. Mathiez, 8 vols. (new ed. Paris 1922-24); Bougeart, Alfred, *Marat, l'ami du peuple*, 2 vols. (Paris 1865); Chevremont, François, *Jean Paul Marat, orné de son portrait: esprit politique, accompagné de sa vie scientifique, politique et privée*, 2 vols. (Paris 1880); Cunow, Heinrich, *Die revolutionäre Zeitungsliteratur Frankreichs während der Jahre 1789-94* (Berlin 1908).

MARCEL, ÉTIENNE (died 1358), French political leader. After the capture of John II by the English at Poitiers in 1356 Marcel, a wealthy cloth merchant who had become provost of the merchants of Paris in 1355, assumed the direction of the Estates General of northern France, which had been convoked by the financially embarrassed regent, the dauphin Charles. In his attempt to force Charles and his government to recognize the authority of the Estates the popular leader was supported by Robert Le Coq, the eloquent bishop of Laon, and by Charles the Bad, king of Navarre. At the same time as organizer of the city's defense he had at his command the military strength and resources of the local militia. Provoked by the vigorous opposition of the dauphin-regent and by his manipulation of the currency, Marcel released the revolutionary passions of the Parisian burghers and caused the marshals of Champagne and Normandy to be publicly massacred; nor did he hesitate to give encouragement to the uprising against the feudal nobility of the lower orders in Beauvaisis—a rebellion which under the name

of the Jacquerie spread to other provinces of France. When the nobles turned upon the peasants in a thoroughgoing attempt at suppression, Marcel apparently, as is indicated by his letters to the Flemish cities, considered the creation of an extensive federation of communes. The Parisian bourgeoisie, however, was frightened by the excesses of the Jacques; and as the dauphin was laying siege to Paris, the provost appealed to Charles of Navarre, appointed him captain of the city and arranged for the entry of troops. But the fact that there were a number of English soldiers among the troops of Navarre provided Marcel's enemies with the opportunity of accusing him of treason. He was killed before one of the city gates on July 31, 1358. Because of the firmness of Charles as dauphin and as king Marcel's dream of a quasi-democratic regime perished with him, although some of the provisions of the reform ordinance which the provost had imposed upon the Estates in 1357, especially that concerning financial organization, were preserved. In the second half of the nineteenth century Marcel was extolled as an ancestor of municipal franchise and public liberties in France.

HENRI HAUSER

Consult: Perrens, F. T., *Étienne Marcel et le gouvernement de la bourgeoisie au quatorzième siècle (1356-1358)* (Paris 1860), and *Étienne Marcel prévôt des marchands, 1354-1358* (Paris 1874); Delachenal, Roland, *Histoire de Charles V*, 5 vols. (Paris 1909-31), especially vols. i-ii; Meyer, Edmond, *Charles II, roi de Navarre, comte d'Évreux* (Paris 1898); Le Febvre, Yves, *Étienne Marcel* (Paris 1926).

MARCEY, JANE (1769-1858), English popular writer. Jane Marcey composed treatises, mostly in the form of dialogues, on a large variety of scientific and educational subjects, including physics and chemistry, botany and zoology, grammar, history and politics. Her most important works were on economic subjects. *Conversations in Political Economy* (London 1816, 7th ed. 1839), although it did not profess to contain anything original, is nevertheless interesting as a simple and non-controversial account of the main economic doctrines current in the period immediately preceding the publication of Ricardo's *Principles*. It was very widely read and received warm praise from J. B. Say, McCulloch and Lord Macaulay; and Harriet Martineau was inspired by reading it to undertake her still more influential work in the same field. Of less significance are *John Hopkins' Notions on Political Economy* (London 1833) and *Rich and*

Poor (London 1851), both of which were addressed primarily to the working classes, the latter in particular being intended "to show poor children that the rich are their friends and not their foes."

LINDLEY M. FRASER

MARCUS AURELIUS. *See* AURELIUS ANTONINUS, MARCUS.

MARGINAL UTILITY. *See* VALUE; ECONOMICS, section on MARGINAL UTILITY ECONOMICS.

MARIA THERESA (1717-80), empress of Austria. Although her father, Charles VI, had prepared for her accession by the Pragmatic Sanction of 1713 and by international treaties guaranteeing the sanction, Maria Theresa's enthronement upon the extinction of the male Hapsburg line in 1740 was the beginning of bitter wars involving almost all of Europe as well as America. On the advice of her chancellor of state Kaunitz she broke with the anti-Bourbon tradition after the War of the Austrian Succession (1740-48) and fought the Seven Years' War (1756-63) in alliance with France rather than England. She was unable either to regain the province of Silesia snatched by Frederick the Great in 1740 or fully to compensate for its loss by the acquisition of Galicia through the partition of Poland in 1772. During her reign her rival and contemporary Frederick the Great developed Prussia into a great power with ever more formidable pretensions to the sovereignty of the German states within the Holy Roman Empire. But the net result of her military activities against a superior enemy was to preserve the house of Hapsburg, the modern dynastic line of which she founded, for a new ascendancy as the ruler of its hereditary dominions. After 1745 neither friend nor foe denied Maria Theresa the title of empress and she was able to carry out her great internal reforms.

Motivated at the beginning of her reign by the military necessity of strengthening her army and finances and later by the ambition to counterbalance the loss of the rich industrial province of Silesia, Maria Theresa adopted a policy aimed at the increase of the royal power and at governmental centralization. Her program, involving political, administrative, fiscal, economic and social elements, was in harmony with the tendency then prevalent on the continent toward the building up of the absolute state and with the cameral-

istic theories and ideas associated with this tendency. Without resorting to violence the crown deprived the estates—provinces and church—of their traditional autonomy and incorporated both aristocracy and clergy into the service of the state. Those whom Maria Theresa chose as advisers were men oriented in the absolutistic ideas and sympathetic with her imperious will to power. Her principal counselors in internal policy were Bartenstein, Haugwitz and Kaunitz (who was also foreign minister); the most important scientists and publicists in her service, Martini and Sonnenfels. The system of justice and administration was completely reorganized: whereas formerly the two branches had been combined and ineffective, separate supreme institutions were now established for each function and placed at the head of highly centralized systems which nullified the previous position of the feudal lords as intermediaries between government and subjects. The army was remodeled after the Prussian example; the financial system by which it was maintained surpassed in modernity that created by Frederick the Great. To cope with the situation produced by its increasing demands upon the taxpaying capacity of the population the state undertook the advancement and regulation of economic activity on mercantilistic lines. New industries were propagated, such as textiles in what is modern Czechoslovakia and porcelain in Vienna. In the latter part of her reign, when Maria Theresa felt the influence of physiocracy, she supplemented her interest in industry and commerce by measures for the social and economic welfare of the farmers. For the first time wide tracts of land in the southeastern portion of the Hapsburg dominions were opened for settlement—a proceeding whose consequences may be traced in the modern problem of German minorities in that region. As the patron of education and culture Maria Theresa founded the Austrian elementary school as well as a system of higher instruction devised partly under rationalistic inspiration, partly for the furtherance of Catholicism and Germanization.

One of the greatest of the Hapsburgs, Maria Theresa was the founder of the modern Austrian state. She had to limit her internal policy largely to Austria and Bohemia, thus paving the way for the nineteenth century dual monarchy. There had been some foreshadowing of her reforms by her immediate predecessors and many of her more radical innovations were modified during her reign. But much of her social and cultural

work was of permanent significance and has survived the collapse of the power of her house.

REINHOLD LORENZ

Consult: Arneth, Alfred von, *Geschichte Maria Theresias*, 10 vols. (Vienna 1863-79); Guglia, Eugen, *Maria Theresia*, 2 vols. (Munich 1917); Kretschmayr, H., *Maria Theresia* (Gotha 1925); Uhlirz, K., "Die Reformen Maria Theresias und Joseph II." in *Handbuch der Geschichte Österreichs*, vol. ii, pt. i (Graz 1930) sect. 21; Dorschel, G., *Maria Theresias Staats- und Lebensanschauung*, *Geschichtliche Untersuchungen*, vol. v, pt. iii (Gotha 1908); Bright, J. F., *Maria Theresia* (London 1897); Lorenz, R., "Die Regierung Maria Theresias in der gesamtdeutschen Geschichte" in *Gesamtverein der deutschen Geschichts- und Altertumsvereine, Korrespondenzblatt*, vol. lxxviii (1930) cols. 179-90.

MARIANA, JUAN DE (1536-1623), Spanish theologian, historian, political theorist and economist. Mariana became a Jesuit at the age of seventeen and after holding professorships in Rome and Paris retired in 1574 to Toledo, where the greater part of his numerous and varied writings were produced. While the *De rege et regis institutione* and the *Historiae de rebus Hispaniae* may be taken to represent the two extremes of his intellectual activity, in some respects these works are mutually complementary. The thesis presented in the former that the only possibility of preventing the royal power from transcending the dictates of natural reason and law was through the union of the nation with the papacy becomes explicable in terms of the situation in Spain with its absolute Hapsburgs and feeble Cortes. In so far as Mariana's doctrine recognizes the primacy of the nation it is democratic in its aim, but its whole orientation is scholastic: the democratic mechanism of majority rule he rejects as a method of counting but not of weighing votes. The doctrine culminates in the principle of tyrannicide—a principle which found numerous adherents all over Europe and which, although it had been stated centuries before, made Mariana's name a household word. To regard it as a justification of assassination in general is to misinterpret it. Mariana, one of the outstanding representatives of Jesuit political theory, merely says that when an absolute ruler degenerates into a tyrant by acting contrary to the public will and weal and by forcefully suppressing the liberties of the nation, tyrannicide is the only method of effecting the essential purpose of revolution; that is, the overthrow of the state. As for the institution of monarchy he condones it as the least evil form of government, although he considers government itself to be

only a historical and not an inherent necessity. This view, along with his eulogy of communal primitive life, which has caused him to be regarded as a precursor of Rousseau, and his justification of the appeal to law in the absence of royal equity, is typical of the theologians of his time. The determining principle of Mariana's social doctrines would in modern terminology be called the social welfare or, more precisely, humanitarianism. Because the church had come to look upon its wealth as private property rather than as a trust held for the benefit of the general public, he demanded that it be reduced. He censured the theater and bullfights for their effects upon morals. He insisted upon the obligation of the state to care for the poor and to promote the economic life of the nation, particularly agriculture. As elaborated especially in the treatise *De monetæ mutatione* his stern and courageous strictures on debasement of the coinage, for which he was subjected to lengthy criminal proceedings, testify to his economic perspicacity and are noteworthy in that they lay stress on the increase in prices resulting from currency depreciation. He also discusses problems of public finance, advocating the abolition of tax farming and the instalment of systems of accounting and budgeting; his views with regard to the general sales tax clearly adumbrate the idea of graduated taxation. Mariana's outstanding contribution is the *Historiae de rebus Hispaniae*. His sources include along with documentary evidence much that is legendary or pure fable; but within a framework provided by the Catholic idea of divine guidance he somehow managed to weave this material into a unified history, which is not only methodical and erudite but a literary masterpiece.

RECAREDO FERNÁNDEZ DE VELASCO

Works: *De rege et regis institutione* (Toledo 1598?, new ed. Frankfurt 1640; tr. into Spanish, new ed. Barcelona 1880); *Manual para la administración de Sacramentos* (Toledo 1581); *De ponderibus et mensuris* (Toledo 1599); *Historiae de rebus Hispaniae* (Toledo 1592; new ed. with additions by J. Miñana, The Hague 1733; tr. into Spanish by author, 2 vols., Toledo 1601; tr. into English by John Stevens, London 1699); *De monetæ mutatione* in his *Tractatus VII* (Cologne 1609). The *Historiae* . . . and *De monetæ mutatione* appear in Mariana's *Obras*, Biblioteca de Autores Españoles, vols. xxx-xxxi, 2 vols. (Madrid 1854).

Consult: Gonzalez de la Calle, P. U., "Ideas político-morales del P. Juan de Mariana" in *Revista de archivos, bibliotecas y museos*, 3rd ser., vol. xxix (1913) 388-406, vol. xxx (1914) 46-60, 201-28, vol. xxxi (1914) 242-62, and vol. xxxii (1915) 400-19; Paula Garzón, Francisco de, *El P. Juan de Mariana y las escuelas liberales* (Madrid 1889); Fernández de Ve-

Iasco, R., "Apuntes para un estudio sobre el tiranicidio y el P. Juan de Mariana" in *Referencias . . . para la historia de la literatura política en España* (Madrid 1925); Antoniadis, B., "Die Staatslehre des Mariana" in *Archiv für Geschichte der Philosophie*, vol. xxi (1908) 166-95, 299-332; Cirot, Georges, *Études sur l'historiographie espagnole. Mariana, historien*, Bibliothèque de la Fondation Thiers, vol. viii (Bordeaux 1905); Laures, J., *The Political Economy of Juan de Mariana* (New York 1928); Allen, J. W., *A History of Political Thought in the Sixteenth Century* (London 1928) p. 360-66; Figgis, J. Neville, "On Some Political Theories of the Early Jesuits" in Royal Historical Society, *Transactions*, n.s., vol. xi (1897) 89-112.

MARIÁTEGUI, JOSÉ CARLOS (1891-1930), Peruvian sociologist and publicist. As a youthful poet and editor of *Razón* Mariátegui attracted the interest of President Leguía, dictator of Peru, who suppressed the magazine in 1920 and sent him to Europe, providing him with funds in the hope of winning him as an ally. In Europe he traveled, studied and wrote a series of essays on post-war politics: the crisis of democracy, Fascism as a capitalistic reaction, the appearance of Russian Communism, the awakening of the Orient. Returning home in 1923 he took up the struggle against Leguía and founded the revolutionary review *Amauta* (1926-30). His thinking, extremely advanced for Hispano-America, became a powerful influence among the younger generation; to it may be ascribed in part the *aprista* movement. His *Siete ensayos*, an interpretation of Peruvian affairs from a quasi-Marxian point of view, epitomizes his ideas somewhat sketchily and unsystematically. Mariátegui believed the Peruvian to be by nature unusually receptive to the world wide repercussions of the Russian Revolution, whose thought he tried to adapt to native conditions. His aim was to graft modern socialistic action upon indigenous tradition. He called himself a communist but was not a member of the Communist party. He regarded the purely political questions discussed since the attainment of independence as of interest solely to the semifeudal and bourgeois classes; the real Peruvian problem, he saw as one of the Indian, the land and the class struggle. The Inca collectivist economy had been destroyed by the Spanish conquerors, who on the remnants of the *ayllu* (the Inca agrarian community), which encouraged labor and made it agreeable, erected a feudal economy. Depending at first almost exclusively on mining, this developed into a bourgeois economy based on guano and saltpeter and later on sugar and cotton. With the gradual absorption of the *ayllu*

into landed estates the Indian fell into serfdom. The large landowners, lacking a creative industrial spirit, subordinated production to the fluctuating interests of foreign merchants. Capitalist evolution lagged and the absence of a vigorous capitalist class prevented the Indian from becoming a free wage earner and as such emancipating himself by organization. The Indian problem is not one of ethnic inferiority; it is not primarily moral or educational; it is economic and essentially a land problem. The liquidation of great estates is essential; the goal is not the creation of small estates but the nationalization of sources of wealth. Socialism is for Peru a historical necessity. There must be a return to the primitive community with a new spirit based on the new technique.

Mariátegui's intrepid will was daunted by neither disease nor poverty, persecutions nor imprisonment. He left behind an unfinished defense of Marxism, part of which appeared in *Amauta*.

ROBERTO F. GIUSTI

Important works: *La escena contemporánea* (Lima 1925); *Siete ensayos de la realidad peruana* (Lima 1928).

Consult: Frank, Waldo, "A Communication" in *New Republic*, vol. lxiii (1930) 181-82; Belaúnde, Victor A., "En torno al último libro de Mariátegui" in *Mercurio peruano*, vol. xviii (1929) 205-29, and vol. xix (1929) 333-45, 565-83; Ulloa, Alberto, in *Nueva revista peruana*, vol. ii (1930) 261-79.

MARINE INSURANCE. The purpose of marine insurance is to provide for ships and cargo protection against loss from the perils of the sea. Its rules and policies differ in many important respects from other forms of insurance. Marine insurance companies frequently write also fire insurance and insurance against the risks of inland transportation, including automobile and aircraft insurance. Although the amount of ocean marine insurance in force is small in comparison with the totals of some other forms, it plays an extremely important economic role in its relation to oversea transportation.

Marine insurance was the earliest form of insurance. Coincident with the development of commercial intercourse by water routes there arose the need of protection against loss by the sea or by pirates. The type of indemnity first used was cooperative, in the form of what is now called general average. Under this form sacrifices by jettison in order to save the ship and its cargo were shared ratably by all interests

concerned in the adventure. General average was recognized as a maritime custom in Rhodes, as is evidenced by the marine code issued in 916 B.C. Contribution for loss by jettison only could not long meet the requirements of commerce and there was devised a system, prominent in ancient Greece, by which a loan was made by bankers against the pledge of the ship or of the cargo, repayable only in the event of the safe arrival of the pledged property. The loan carried interest at a high rate, equivalent to the bank rate for the use of the money plus a charge (*faenus nauticum*), similar to the present premium charge, for the risk of cancellation of the obligation in the event of the non-arrival of the ship or the cargo. When the ship was pledged, the loan was under a bottomry bond; when the cargo was pledged, a *respondentia* bond was used. This form of protection continued to be used for hundreds of years, even to a considerable degree after marine insurance in its present form was available. This latter system was devised probably by the Jews when they were banished from France in 1182. During this exodus they originated the bill of exchange, and the insurance policy was doubtless a by-product of the necessity of protection against the loss of their property in removal. The system was a reversal of the bottomry and *respondentia* bonds. No loan was made but a premium was paid, in consideration of which the amount insured would be paid in the event of the loss or destruction of the property by any of the fortuitous happenings (perils) named in the policy.

The new form of insurance quickly developed and spread throughout maritime Europe. By the fourteenth century it was being used on a considerable scale in the Italian cities, especially by the Lombards, in Spain, France and Flanders and by the Hansa merchants. The development of marine insurance was stimulated by the growth of commerce and by the wars and piracy which made insurance indispensable. It was moreover an auspicious time for the spread of the new aid to commercial intercourse, as over-sea activities had greatly increased as a result of the introduction of the mariner's compass and in the subsequent age of discovery. Marine insurance was usually carried on by merchants and shipowners who were accustomed to distribute their investments in several ships and thus spread their possibility of loss. By the end of the seventeenth century marine insurance had been established practically in its modern forms; by the end of the eighteenth England because of

the great development of its shipping had secured the lead in marine insurance which it has since maintained.

Marine insurance was introduced into England by the Hansa merchants. It was brought to a high point of development by the Lombard merchants, who followed them and who gained the commercial supremacy in England in the fifteenth century. Corporate underwriting as practised today was unknown, the amount insured being underwritten by individuals, each taking a share of the whole amount required. To facilitate the underwriting of risks merchants and shipowners employed agents who interviewed underwriters at their homes or places of business, obtaining signatures to the policy of insurance. Thus by common necessity appeared both underwriter and broker, the latter the assured's agent. Somewhat later numbers of these underwriters formed the habit of frequenting the coffeehouse of Edward Lloyd. As an aid to his business Lloyd bulletined maritime and commercial news of interest to his patrons, and the brokers found his coffeshop a convenient place to interview the underwriters. In 1769 the underwriters formed a definite organization under the name of Lloyd's and moved to the Royal Exchange. This was the forerunner of the present powerful Lloyd's, London, with its underwriting activities and its world wide maritime news and commercial services. Corporate underwriting began in England in 1720 with the organization of the London Assurance Corporation and the Royal Exchange Assurance Corporation under a grant of monopoly by the crown. One hundred years later the monopoly was ended and numerous additional companies were chartered. Throughout this entire period the individual underwriters at Lloyd's continued their activities, gradually growing into a most powerful underwriting group. Lloyd's secured an enormous amount of business both domestic and foreign as a result of the revolutionary and Napoleonic wars.

Although individual underwriting was early introduced into the North American colonies, its success was very limited. The first incorporated marine insurance company, formed in 1792, did a large business because of the unsatisfactory experience with individual underwriters; by 1820 the latter had practically ceased to exist. Underwriters suffered great losses during the War of 1812, and marine insurance declined as a result of the almost total disappearance of American shipping from the seas; the consequent

decline in marine insurance resulted in bitter competition and more losses. The subsequent revival of shipping stimulated the marine insurance business, but from 1828 to 1844 insurance companies were crippled by many fraudulent losses. A great development of marine insurance took place in the 1840's and 1850's because of the triumphs of the American clipper ships, which were wresting shipping from foreign countries. Many new companies were formed and they practically all prospered. This development ended with the decline of American shipping after the Civil War. In 1871 moreover foreign marine insurance companies entered the United States and competed with the American companies, many of which were forced out of business. There was, however, a considerable growth of inland waters insurance. Ocean marine insurance increased with the growth of American foreign trade after 1900 and particularly after the World War. The development of marine insurance in the United States has been relatively slow. Because of the retarded growth of a merchant marine and of constant competition with the old established foreign companies an uphill battle has been fought, but today an American marine insurance facility exists adequate to care for the needs of foreign and domestic maritime commerce. Nevertheless, foreign admitted companies do a large share of the underwriting. Thus in 1930 American companies received \$31,675,323 in premiums and paid \$19,832,999 in losses on ocean marine insurance; the foreign companies received \$12,361,528 in premiums and paid \$7,668,908 in losses. Foreign companies do considerably less of the inland marine business. In 1930 American companies received \$38,238,990 in premiums and paid \$19,438,693 in losses on inland insurance; foreign companies received \$8,391,006 in premiums and paid \$3,628,438 in losses.

The marine insurance policy in use today in the United States and England differs little in its essential features from the earliest known policy issued in the sixteenth century. The contract does not insure against one peril, but against practically all of the fortuitous hazards which may overtake a vessel or its cargo on a sea voyage. In this respect the marine insurance contract differs from the ordinary policy covering fixed property which affords protection against but one peril, such as fire or cyclone or earthquake. The marine policy covers perils of the sea due to wind, wave and storm, perils on the sea such as fire and collision and those other

perils that arise from the criminal acts of men (theft and barratry) and those that grow out of conflicts between nations, the so-called war perils.

Another feature peculiar to marine insurance is that the policy is valued; that is, the measure of recovery is determined not by the value of the affected property at the time and place of loss but by the pre-agreed value placed upon the property when it is insured. Only in the case of provable fraud can the valuation provided in the policy be questioned after loss has occurred. The valued policy does not increase the moral hazard, as might be expected, for the cargo is out of the custody and control of the insured during the term of the insurance. Likewise the destruction of the vessel could be effected only by collusion between the owner, the captain and the crew, a remote possibility.

As the policy covers only against fortuitous happenings, it places a high degree of responsibility upon those in whose custody the property is placed: the carrier in the case of the cargo and the master in the case of the hull. In many cases the insurance is broadened to cover some of the negligence hazards; but from the point of view of public policy such extension of cover is unwise, as it leads to a lessening of care on the part of those responsible for the safety of the property.

The cargo policy is an essential document in the financing of oversea shipments. The bill of lading is the evidence that a shipment of goods has been made, the goods being identified by marks and numbers or other designation. In like manner the insurance policy names the assured, the payee of loss, the forwarding steamer or other carrier, the points of origin and of destination, the amount insured and the number of packages and their marks and numbers. It is dated the same day as the bill of lading. The draft or bill of exchange is drawn, attached to the bill of lading and the insurance contract and presented to the bank for discount or for collection. The insurance policy like the bill of lading is a quasi-negotiable instrument and passes title by endorsement. Thus the documents pass from holder to holder until they are finally presented to the ultimate buyer for payment; the latter in any port of the world or at some neighboring commercial center may obtain the indemnity provided by presenting to the insurance company's representative proper proof of loss. The terms and conditions of the insurance are set forth in detail in the insurance policy, but in the

settlement of the claim it is customary in adjusting the loss to follow the commercial and insurance customs of the port of destination. Marine insurance being international in its application strives to conform to local trade customs, which vary greatly among the various nations.

The basic policy covers the property only while it is on board the carrying conveyance. For modern purposes this protection is too limited, and the insurance has been extended by the "warehouse to warehouse" clause to cover the goods from the time they leave the warehouse at the point of origin until in the ordinary course of transit they are delivered to the warehouse at the final point of destination.

Separate forms containing special clauses are provided for the insurance of various commodities, such as cotton, grain, sugar, coal and the like. Policies have also been devised for the insurance of ocean vessels, lake and river craft, yachts and tugboats. One of the distinguishing features of these forms is the clause relating to the percentage of damage necessary to comprise a valid claim, especially with respect to particular average; that is, partial loss. Particular average clauses are of many kinds, the purpose of each being to set forth the conditions under which partial loss claims will be paid. Thus there are clauses which provide that partial loss claims will be allowed only if the loss be caused by stranding, sinking, burning or collision. Other clauses require that the loss shall amount to a certain percentage of the assured value or to a named sum, or it may be required that from the loss as adjusted there shall be deducted a named amount. These latter are called deductible average clauses. The memorandum clause which appears in most cargo policies contains a list of commodities, some with the percentage of loss necessary on each for a particular average claim, while on others partial loss claims are limited to those of a general average nature. This is the only reference in the cargo policy to general average, but claims of this nature are paid irrespective of percentage. The marine insurance contract has thus had incorporated into it the principles of general average and provides indemnity for the ratable proportion of general average charges assessed against the insured property.

Every type of vessel and each kind of cargo presents to the marine underwriter a different problem. The hazards to which sailing vessels or non-powered vessels are subject differ greatly

from those presented by an iron or steel steamer. Again there are problems involved in the repair of oil burning steamers and motor ships which must be reflected in the rate. Vessels equipped with twin screws or with radio direction finders and other aids to navigation are better risks than those not so equipped. Fast passenger steamers present a different underwriting problem from that of the slow tramp freighter.

The insurance of bulk cargoes, such as grain, coal and ore, presents individual problems, as do shipments of raw or refined sugar, which are highly susceptible to damage. On the other hand, the basic metals, such as copper, zinc, tin and pig iron, are not susceptible to damage but only to total loss or general average and so are insured at a relatively low rate. Manufactured goods present a range of varying hazards—from copper wire, with little hazard, to radio tubes, which are difficult to ship overseas without incurring breakage losses. Then there are the commodities of a very perishable nature which are shipped in refrigerator space, such as fresh meats, poultry, fish, fruit and eggs. Rates consequently vary widely because of the nature of the insured commodity and the broadness of the protection desired by the assured. Special clauses have been devised to meet the peculiar underwriting problems presented by each commodity. The primary purpose behind each clause is to furnish protection against unexpected and unpreventable loss but to exclude the normal loss or the loss due to the inherent qualities of the subject of insurance. It is an implied condition of cargo policies that losses due to inherent vice or due to improper packing are not recoverable.

The amount, or freight, paid to the owner of the vessel by the owner of the cargo for its carriage is also a subject of marine insurance; but whether the insurable interest is in the shipowner or the cargo owner depends upon the terms of the contract of carriage, namely, the bill of lading. If the freight is prepaid or is guaranteed it has entered into the cost of the goods and is insurable by the cargo owner. If, on the other hand, the freight is payable only on the delivery of the cargo, the freight is at the risk of the shipowner and insurable by him. There are many forms of freight contracts, each of which presents an interesting and sometimes a difficult marine insurance problem.

The amount to be insured normally has little effect on the rate, unless it be so great that it exhausts the available market. In this event higher rates will have to be paid in order to

complete the insurance, the increased rate inducing some underwriters to write increased amounts or interesting underwriters who would not be attracted by the lower rate.

In the United States underwriting is carried on exclusively by corporations. This is true in general in all countries except England, where individual and corporate underwriting flourish side by side. The responsibility of the corporation is limited by its financial structure. The individual underwriter at Lloyd's pledges his all as the security behind his name. Furthermore he can obtain membership in Lloyd's only if he can meet the very severe financial requirements of the organization. These provide not only for proof of his financial worth but also for the deposit of a considerable sum of money (£5000 minimum, although the usual deposit is considerably larger) as a contribution to the general guaranty fund of the organization.

There is a marked difference in the function of the insurance broker in the United States and in England. In the former the broker as agent of the assured places the insurance for and in the name of his client and in the event of loss assists in the adjustment and collection of the claim. In England the broker occupies more of a fiduciary position, normally taking out insurance in his own name for account of his client, paying the premiums, collecting losses and receiving from or paying to his client the debit or credit balance.

In marine insurance as distinct from all other forms there are neither fixed rates nor rating organizations. The fullest and freest competition exists in each market and internationally between the various national insurance centers. Nevertheless, rates fluctuate within very narrow limits because of the keenness of the competition. There is also present another factor, which has a decided effect on rates. No one company or individual can underwrite unlimited amounts; in fact the normal flow of business requires reinsurance facilities which can be purchased only at the approximate market rate. Thus each underwriting unit is restrained from overcommitments by the fear that reinsurance will not be obtainable at a rate equal to or less than the original rate received. Competition becomes destructive when available markets exceed the commercial needs of the world. This condition occurs during each world depression and usually follows a war of any magnitude. Destructive competition in turn leads to associations of underwriters for the purpose of stabilizing or

raising rates through the formation of reinsurance agreements, sometimes known as pools.

Within the last twenty years an entirely new field of insurance has been developed. The introduction of parcel post, the development of the motor truck and the specialization of industry by which different stages in the production of goods occur at different locations have made necessary policies which give continuous protection against practically all risks, whether the goods are in transit or in temporary storage or in process of manufacture. The marine policy affording protection against many perils was admirably suited to be the basic form of the many different types of policies required to compass the needs of modern industry. Thus inland marine insurance was conceived and developed. Inland policies are provided for the insurance of jewelry, furs, works of art and in fact any commodity which for a greater or less part of the time is in transit. The development of the airplane has also required many new types of insurance to provide for protection to the plane and to its cargo; the marine policy is again the form upon which special aviation policies are based. In the United States in 1930 premiums on inland insurance amounted to \$46,629,996; on motor vehicle insurance, \$124,224,727; on aircraft insurance, \$1,556,919.

Although for many years marine insurance developed with little or no legislative regulation, this became inevitable because of abuses practised by the underwriters. In 1435 Barcelona began to issue ordinances and codes governing marine insurance, in 1468 the Grand Council of Venice adopted a decree concerning the trial of disputes and in 1523 Florence enacted important legislation. The early legislation was frequently ill conceived and restrictive; insurance courts, however, met with considerable success. There was no legislation in England until 1601, when there was established a tribunal for the trial of disputes which had been previously settled by arbitration. Thereafter legislation developed steadily. At present marine insurance in England is regulated by the Marine Insurance Act of 1906 and the Gambling Policies Act of 1909. In the United States there are various state laws which regulate marine insurance, although the legal restrictions are much less than in the case of life and fire insurance; New York, unlike certain other states, does not limit the amount which any one company can carry on any one risk.

As marine insurance is an international busi-

ness, the companies competing actively in the world's markets, difficulties are created by the national differences in marine insurance laws covering such questions as constructive total loss, effect of unseaworthiness and negligence. Efforts, however, have been made by the companies themselves to secure international uniformity of interpretation and practise as well as to modify the rigors of competition.

There are no bureaus either national or state attempting to fix marine insurance rates. During the World War, however, the American government following the lead of the other belligerents provided state insurance facilities for the protection of hull and cargo against war hazards. Non-belligerent nations made similar provisions. Values increased so rapidly and the war hazards at sea were so serious that the private marine insurance facility neither of the groups of belligerents nor of the neutral markets was adequate to afford protection against war perils. State marine insurance lapsed after the end of the war; it was a war measure and successfully served its purpose. In some cases, however, state insurance has continued in another form: to provide for the tremendous values involved in the modern transatlantic passenger steamers. Many of these are subsidized or financed with money borrowed from governments, and state bureaus have been organized to insure the values in excess of the capacity of the commercial insurance markets.

Great Britain is still dominant in the business of marine insurance; British companies have a network of agents and offices in all parts of the world wherever oversea commerce is in need of an insurance facility. The income from this business is an important item in Great Britain's balance of payments. Only in recent years have American companies similarly extended their operations; this has occurred not through the activity of any single company but through the formation of a syndicate of companies, which is carrying on an active business in many of the important foreign maritime communities. These developments are a logical growth of the increasing world wide scope of the commercial and financial interests of the United States.

Were it not for marine insurance oversea commerce on the gigantic modern scale would be impossible; it provides the necessary protection for the exchange of commodities and of the gold necessary to settle international balances and for the construction and operation of the modern ocean greyhound or freight ship. Marine

insurance premiums from foreign sources are one of the invisible items in the building up and settlement of international balances. It is of vital importance that a country control as far as possible the insurance on its own ships and cargoes. In the event of war a national insurance facility together with a national merchant marine is necessary to guarantee the continuance of the nation's oversea trade. Free marine insurance competition between the national markets aids greatly in the free exchange of commodities at a minimum of cost. Any regulation of an instrument of international commerce, as marine insurance is, has a decided tendency to make the regulated market the target for the uncontrolled competition of every competing market.

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See: INSURANCE; SHIPPING; INTERNATIONAL TRADE; MARITIME LAW; FIRE INSURANCE; AUTOMOBILE INSURANCE.

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MARITAL PROPERTY. In no field of law during the past century has there been more radical change than in the property relations of married persons, particularly in the countries

which have followed the English common law system. On the continent the general codification movement has materially reduced the previous diversity in practise. Generalization, however, is as yet very difficult. Legal systems still give extremely diverse answers to questions of marital property law, and the confidential nature of the relationship between husband and wife has hindered progress in dealing with them. Every system of law must solve certain problems, as, for example, the effect of marriage upon the property previously owned, the management and control of such property and also of subsequent acquisitions for the duration of the marriage, the devolution of the various types of property when the family becomes disorganized as the result of death or divorce. The solution of these problems is affected by the prevailing views as to the constitution of the family and the nature of marriage.

In early legal systems efforts were made to keep the property in the family group intact; thus there was as yet no real recognition of matrimonial property relations. The family in its narrower sense and not the individual was still the important property unit; the head of the family was a sort of trustee, and the property was largely under group control. It was not until social disintegration had taken place within the family that more radical changes came about.

In early republican Rome, when marriage *cum manu* was the prevailing form, married women had few legal rights. The proprietary relations between husband and wife were placed upon the same footing as those between a paterfamilias and the children *in potestate*. Property owned by a woman prior to marriage as well as property of all kinds however acquired thereafter passed by operation of law to her husband. In some cases this transfer carried with it the liability for the wife's antenuptial obligations. Upon her husband's death, however, the wife had the same rights of succession as the children *in potestate*, although she remained subject to tutela, or guardianship, which represented an effort to keep within the family the property she had thus acquired. This system changed with alterations in the nature of marriage. Marriage *in manu*, created by *confarreatio*, *coemptio* and *usus*, gradually became obsolete and in its place there developed free marriage, or *matrimonium juris gentium*. This type of marriage gave the husband no such power over the wife as he had previously possessed. The wife's antenuptial property continued to be hers; acquisitions from

whatever source during coverture did not accrue to the husband but were her sole property. Furthermore she had unlimited power to deal with such property; no control was vested in the husband. Thus there developed under the Roman law the principle of a separate estate in the married woman. On death neither spouse had any right in the property of the other. The wife, it is true, continued under the guardianship of those appointed by her parents after the marriage, but the tendency of the later law was to reduce the power of a woman's tutor to nullity. The result was that a married woman had a great proprietary independence. Such control over the property relations of married persons as existed was by virtue of the Roman dotal system. The dotal property consisted of the *dos*, or dowry, and the *donatio propter nuptias*, the gift from the husband to the wife. By the third century A.D., when the new conception of marriage had come completely to prevail, gifts between the spouses during coverture were prohibited; such gifts, which were originally unrestricted, had to be made before the marriage took place. Justinian allowed gifts in favor of marriage; the reason for the previous prohibition of such gifts was the prevention of foolish generosity.

The freedom of married women in Rome with regard to property affairs was not, however, to continue. Reaction set in because of the disfavor with which the Christian church regarded the freedom and laxity prevailing in the Roman law of marriage. With the superimposition of barbarian practises and laws women again became subject to the various forms of archaic guardianship, which were carried over into the codes of the Middle Ages. From the Roman law the independence of unmarried women survived; from the barbarian codes the husband obtained over the wife the powers which once had belonged to her male kin. The canon law and not the Roman exercised a powerful influence, and the former tended to perpetuate the proprietary disabilities of married women. The conflict between the secular and the canon law was widespread, but in the end the latter gained the ascendancy.

Prior to the establishment of the feudal system, which because of the necessities of military tenure was unfavorable to their holding land, married women had acquired both in England and on the continent certain proprietary capacity. There is considerable evidence that on the continent among the Germanic peoples the

personal property (*Gerade*) given a woman by her family upon her marriage was under the complete control of the wife and that she had the power to alienate it without her husband's consent. The morning gift and earnings were the wife's property, although during the husband's lifetime they were probably under his control. Under the Anglo-Saxon law the wife apparently had considerable property rights. She had absolute ownership of the morning gift, and it seems that with her husband she was copossessor of the family property. The husband could not alienate his property without her consent.

The English common law in regard to marital property relations was an outgrowth of a conception of marriage which was strongly influenced by the canon law because of the control of marital problems by the ecclesiastical courts. It carried the subjection of the wife to its logical extreme. As Blackstone said: "By marriage, the husband and wife are one person in law: that is, the very being or legal existence of the woman is suspended during the marriage, or at least is incorporated and consolidated into that of the husband" (*Commentaries*, I, 442). All the personal property which was in the wife's possession at the time of the marriage vested absolutely in her husband. With it went absolute control: the husband could dispose of it during his life or bequeath it at his death; if he died intestate it went to his personal representatives. The case was similar with respect to personal property which the wife acquired in any way during the marriage. The wife's "paraphernalia," her dress and personal adornments, if not disposed of by the husband during his lifetime became hers absolutely; creditors, however, could enforce claims against it. The wife's choses in action, however, became the husband's only if he brought suit to reduce them to possession. In regard to the wife's chattels real, such as leases, the position was somewhat different. If the husband did not actually appropriate them during marriage, they vested absolutely in the wife if she survived him. If the husband survived, the chattels real belonged to him by marital right and not as representing the wife. Chattels real were liable for the husband's debts, and their rents and profits belonged to him. By the right of the marriage the husband had in his wife's estates of freehold an estate which lasted until his or her death, from which he was entitled to the rents and profits free from any claim of the wife. The husband could alienate this estate

without his wife's concurrence. The seisin was said to be in him and his wife jointly. If, however, the wife survived the husband, she and her heirs were entitled to the land even though the husband might have made some disposition thereof. Because the wife had no property over which she had control during the coverture and because of her general contractual incapacity, which was due entirely to her proprietary disabilities, the conveyance of a married woman was absolutely void. The land could be effectively conveyed only by the levying of a fine by husband and wife.

In addition to his other marital property rights the husband had the right of curtesy. If a child of a marriage was born alive and capable of inheriting from its mother, the husband had an estate of curtesy initiate in the freeholds of inheritance of which his wife was seised. Upon the death of the wife with the husband surviving this became an estate by curtesy consummate, entitling him to an interest for life in all his wife's inheritable estates. By the time of Bracton the husband was called "tenant by the curtesy of England" (*tenens per legem Angliae*). Pollock and Maitland have suggested that the origin of curtesy may be the husband's profitable guardianship over wife and children. Feudalism also played a part. Whatever its origin it became thoroughly established as a part of the law of England, which favored it greatly. The wife's equitable estates were subject to curtesy, provided the wife was seised at law. The husband's estate by the curtesy did not terminate on his remarriage. Moreover the fact that the land had been conveyed to the wife's sole and separate use did not of itself prevent the husband's curtesy, if the wife had not transferred the property.

The husband's right over the marital property was to some extent offset by the wife's right of dower. Originally determined by custom or agreement, the right of dower had by the end of the Anglo-Saxon period become a legally fixed right of every married woman to a life interest in a third of the land of which her husband had been solely seised, during the marriage, for an estate of inheritance which issue of the wife might by possibility inherit. Thus the husband could not deprive the wife of this right by any alienation. Because of the inconvenience of his situation many ingenious legal methods were devised to bar it. These were made possible by the fact that, differing from the case of curtesy, dower did not attach to equitable estates. Uses and powers of appoint-

ment were employed to avoid passing the legal title. The Dower Act of 1833 entitled a widow to dower in equitable as well as legal estates, but it was also provided that it should attach only to those estates to which the husband was beneficially entitled at his death. A husband could thus bar dower rights by either deed or will.

At common law also if land was conveyed to husband and wife as joint tenants, they became "tenants by the entirety." In contemplation of law such an estate vested in one person, the husband and wife: they were deemed seised of the property, *per tout et non per my*. The chief characteristic of the tenancy by the entirety was the right of the surviving spouse to take the whole property. During his lifetime, however, the husband was entitled to all the rents and profits of the land so held.

The first real improvement of the legal situation of the married woman in England came in equity. In return for the extensive rights which the husband acquired in his wife's property he was under an obligation to support her, but the remedy for neglect was imperfect. Equity came to the assistance of married women in two ways: first, by introducing the doctrine of the wife's "equity to a settlement" in certain cases, that is, when the husband sought the aid of equity in regard to his wife's property, equity would compel him to make adequate provision for her and her children; second, by the development of the doctrine of an "equitable separate estate." Thus property of all kinds settled upon the wife for her sole and separate use was freed from the control of her husband and from liability for his debts. Later, even though no trustees were named, as long as there was a clear intent to free the property from the husband's control, he was regarded as trustee for the wife. It became customary to insert a provision in the instrument creating the separate estate which placed restraints upon the wife's alienation of the property and thus protected her from her husband's persuasion; such restraints were enforced. Unless there was other provision, the husband's rights revived upon the wife's death. As a result of the creation of an equitable separate estate the wife obtained a limited contractual capacity; the English chancery courts decreed performance against such separate estate but did not impose any personal liability. By the nineteenth century there had long been an endeavor to secure for a married woman through equity the right to hold property independently

of her husband and to obtain for her such rights over property as a man or an unmarried woman would have. Marriage settlements, as they were called, were common among the propertied classes; and equity acted mainly to insure the carrying out of the settlors' intentions.

During the course of the nineteenth century, largely as a result of the movement for the emancipation of women, the legislatures in both England and America passed the so-called Married Women's Property acts. In England statutes in the 1870's were forerunners of the Married Women's Property acts of 1882 and 1893. In the United States this type of legislation became common about 1850, although some states acted even earlier. The purpose of these statutes was to create a "statutory separate estate" freed from the claim and control of the husband and not liable for his debts. Quite universally the property acquired prior to marriage became the separate estate of the wife, and generally property acquired by her during coverture by devise, descent, purchase or other means was similarly included in it. The husband's control over the statutory separate estate has been wholly or partially taken away, depending upon the wording of the statutes. Quite generally the wife has been given the right to dispose of her estate as if she were unmarried; some states, however, require the husband's joinder in transfers of real property.

In England neither curtesy, dower nor tenancy by the entirety was held to be ipso facto totally abolished by the Married Women's Property acts. The wife could, however, by disposition *inter vivos* or by will defeat her husband's right to curtesy. The situation was thus the same as with respect to dower under the act of 1833. Both curtesy and dower were finally abolished in England by the Administration of Estates Act of 1925. There were some curious survivals of the theory of entirety in England despite the Married Women's Property Act of 1882, by which a joint limitation to husband and wife without words of severance created an ordinary joint tenancy; but these likewise were abolished when the Law of Property Act was passed in 1925.

In the United States because of the diversity of jurisdiction the situation has naturally been very complex. Here the general interpretation of the Married Women's Property acts has been that they did not abolish the husband's right to curtesy upon his wife's death. Generally it has been held that a wife may bar curtesy by deed

but not by will. Frequently, however, it has been provided by statute that curtesy can exist only in property which the wife has not transferred either *inter vivos* or by testamentary disposition. Statutes in many jurisdictions have expressly abolished curtesy, and some have preserved only curtesy consummate while abolishing curtesy initiate. In certain jurisdictions the husband's interest has been made similar to the wife's dower right. As far as dower is concerned, contrary to English law it has generally been impossible for a husband to bar it by either deed or will, although in the very early years of their history a few states—Connecticut, Vermont, North Carolina and Tennessee—enacted statutes to this effect. The most recent tendency has been both to abolish dower altogether and to give the surviving spouse a definite interest in all kinds of property left by the deceased, a much less cumbersome system. Moreover the Married Women's Property acts have not, as a general rule, been interpreted as abolishing estates by the entirety by implication. Some jurisdictions, however, without the aid of any particular statute have decided that such estates can no longer be created, since they were founded upon an outworn conception of marriage. Statutes in some states have converted them into tenancies in common, under which there is no right of survivorship.

The variety of marital property systems in the countries of western Europe since the early Middle Ages has been particularly bewildering. In some places the Roman dotal system survived. In others systems of community property were recognized, but these too were extremely diverse. Again there was no recognition of community property. To quote Holdsworth, there was "the co-partnership in acquisitions recognized in Spain and south-west France, the co-ownership of movables and acquisitions recognized in France in the *pays du droit coutumier* and in some parts of Germany, and the co-ownership in all property recognized in other parts of Germany. Into the class of regions not recognizing community of ownership fall England, Normandy, a large part of Germany and Switzerland, the *pays du droit écrit* and some parts of the east of France, Italy, and the parts of Spain which recognized the system of the Roman *dos*" (*History of English Law*, vol. iii, p. 522). The type of community property holding owed its origin undoubtedly to the custom of certain Germanic tribes, modified to some extent by the influence of Roman civil law. It

was probably introduced into France by the Franks and into Spain by the Goths.

The regime of community property now exists in many continental countries and other parts of the world. The Roman-Dutch law brought it to south Africa, and French and Spanish law carried it over to America. Because of the influence of France and Spain in Louisiana, of Mexico in New Mexico, California and Texas, it was adopted in these states and it has been extended to Arizona, Washington, Idaho and Nevada.

Under the community property system the husband and wife are considered as constituting a marital community. The fundamental idea of the system is that whatever is acquired by the husband and wife is part of a common matrimonial fund. The husband or the wife may, however, also have "separate" property, either owned at the time of the marriage or subsequently acquired. Generally the husband is looked upon as the managing agent; such share as the wife may be entitled to comes to her after his death. There is of course great variation between the different community property systems, particularly as to the type of property which forms part of the community and the powers of the spouses with respect thereto. Moreover when it is said that community property is a recognized regime in a certain country, this does not mean necessarily that it is compulsory. Freedom of contract with respect to marital property is quite generally allowed; thus in some countries the community system prevails only when it has been expressly adopted as the matrimonial regime, while in others it is the legal regime in the absence of express agreement.

Both the French Civil Code, which became operative in the early part of the nineteenth century, and the German Civil Code, which went into effect at the opening of the present century, still plainly show the marks of their historical antecedents. Under the French code, unless the spouses have otherwise contracted, the marriage brings about a community of goods. The community regime is therefore the statutory regime. Spouses, however, may also choose to be governed by a dotal regime regulated by the code. Under the community regime all movables, both those owned by either spouse at the time of the marriage and those subsequently acquired unless expressly given for the benefit of one spouse, are included in the community of goods. Immovable property is in-

cluded only if purchased with community funds or acquired in exchange for community goods. The general management of the community rests with the husband, but he is restricted in disposing of it. All family expenses are chargeable against community funds. If the marriage is dissolved by death or divorce, one half of the property goes to the husband or his heirs and one half to the wife or her heirs. Only the husband can dispose of his share by will.

In the German Civil Code, which was unable to introduce a single, exclusive marital system, because of the great legal diversity of marital property in the German states, the historical background is likewise apparent. The German statutory regime is one not of community property but of administrative community. Separation of estates is the legal regime under certain special circumstances, as in the case of elopement. But the code regulates also three forms of community property which may be adopted by the marriage contract: a general community of property, a community of income and profits or a community of movables. General community of property includes the property owned by the husband and wife at the time of the marriage and all subsequent acquisitions with the exception of transfers expressly made to one of the spouses as separate property. The community of income and profits includes as community property only the income, profits and earnings accruing to either spouse during coverture, other than income derived by the wife from certain types of property conveyed to her as separate property. Under the community of movables those belonging to either spouse at the time of the marriage or subsequently acquired, except property given to either as separate property, are considered as the community. According to all three systems the husband has the management of the community, but in general the wife is protected against dispositions made by the husband. The surviving spouse is entitled, after the debts have been paid, to one half of the community property; the other half goes to the heirs of the deceased if it is not disposed of by will.

With respect to the eight community property systems in the United States four theories have been propounded as to the nature of the ownership of community property. Until recently California maintained the "single ownership" theory; namely, that the husband owns the community property and the wife has a mere expectancy and not a vested interest and that her

interest is a sort of encumbrance upon the absolute title of her husband and is vested only if he has predeceased her. By recent statutory changes, however, it has been provided that "The respective interests of the husband and wife in community property during continuance of the marriage relation are present, existing and equal interests under the management and control of the husband" (California Civil Code, sect. 161a). The husband cannot alienate the community property in fraud of the wife, give it away without her consent or dispose of more than one half of it by will. Washington has adopted the "entity" theory; that is, that the spouses constitute an entity which owns the community, the parties having equal rights and interests but the husband being the managing director. The husband has the sole power of disposition, just as he has in regard to his separate estate. A result of the so-called entity theory is that the community is not responsible for the separate obligations of the husband. The Idaho theory of "double" ownership, which has been followed in Arizona, Nevada and New Mexico, holds that each spouse owns an undivided and indivisible half of the community property. Texas has adopted the "trust" theory; that is, that the interests of the spouses are beneficially equal. The husband has the legal title; the wife's interest is vested as equitable. The various theories have not always been consistently followed even in the states which have adopted them.

The idea behind the community property system is on the whole a sound one, apart perhaps from the almost exclusive powers of management given to the husband. It recognizes by law the equality between the spouses in regard to property acquired during the marriage by the joint efforts of the parties. Even in the states following the common law system the community idea exists to a considerable extent extralegally. Especially among the middle class the property consists largely of the earnings of the spouses; a large share of such income is necessarily devoted to family expenses and little is left after such obligations have been met. In practise this amounts to a community of matrimonial gains. It is true that statutes accord to the wife her earnings outside the home as her "separate property"; but in the great majority of cases such earnings go to satisfy the current needs of the family. The community idea is in harmony with the present American conception of marriage, whereby the relation between

the spouses is regarded as a partnership to which both contribute.

A. C. JACOBS

See: FAMILY LAW; MARRIAGE; FAMILY; WOMAN, POSITION IN SOCIETY; GUARDIANSHIP; DOWRY; GIFTS; INHERITANCE; SUCCESSION, LAWS OF; DIVORCE; ALIMONY; HOMESTEAD EXEMPTION LAWS; PROPERTY.

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MARITIME LAW is a branch of law which deals chiefly with the legal relations arising from the use of ships. In the Anglo-American system, however, this branch of law is known as admiralty law. In the Middle Ages the scope of the maritime law was considerably wider. It dealt not merely with the subjects included in the modern maritime law but also with the primitive forms of some branches of the modern commercial law, and it even contained the rudiments of that public law which is now styled international law. It must be remembered that commercial transport was from the earliest until comparatively recent times almost invariably by water, in ancient times because the known world was situated around the shores of a great sea and in the mediaeval period because of the hazards and vexations of travel on land. The intimate connection between the maritime and the commercial law has never been wholly lost on the continent. Like the commercial law the maritime law has until recent years developed almost entirely on a customary basis, and the influence of legislation on its substantive content has never been great. Because of the necessary and permanent conditions of trade a tendency to uniformity has also characterized the maritime law, so that it has always had a cosmopolitan character.

The ancient civilizations—Minoan, Mycenaean, Babylonian, Egyptian, Phoenician, Greek—must have had codes or customs of maritime law, but almost nothing has survived. Of the maritime code of the island of Rhodes, dating from the third or second century B.C., which was accepted by both Greeks and Romans, there has demonstrably survived only the *Lex rodia de jactu*. Found in the Digest of Justinian it contains the earliest known provision as to general average. Only the Romans and the English never had a separate code of maritime law, and the maritime law of Rome is to be found in scattered places in the *Codex* and the Digest. The provisions, however, clearly define the parties to the maritime adventure; the shipowners' responsibility for goods shipped, for a passenger's baggage, for the captain's contracts and for the seamen's torts is well established. There are rules as to general average, contribution, jettison and salvage. The maritime loan, of Greek origin, is well known; maritime insurance was in use; a charter party of 236 A.D. is extant.

The first known collection of the maritime laws of the later Roman Empire is imitatively called the Rhodian Sea Law; dating from the eighth century its name testifies eloquently to the enduring reputation of the older code during a millennium. The Rhodian Sea Law is apparently a compilation of earlier customary material but it shows also a responsiveness to new needs; it treats chiefly of losses at sea and of commercial risks in addition to most of the matters already covered by Justinian. It is of historic importance because it was in use in the south of Italy until the fifteenth century and so must have had a great influence in Italy while the Italian maritime law was developing.

In the eleventh century the Italian codes of maritime law commence. Whether or not the *Ordinamenti di Trani* were compiled, as they purport to be, in 1063, it is not improbable that the maritime customs recorded therein were in effect at that time. This is likewise true of the *Tabula amalphitana*, part of which probably was compiled during the eleventh century. The *Constitutum usus* of Pisa dates from 1160, the *Assises de Jérusalem* from 1187, and by the end of the thirteenth century many of the Mediterranean cities possessed their own compilations of maritime customs.

The first known collection of maritime customs made by an Atlantic seaport is the Rolls of Oléron, which by the better opinion is dated in the first half of the twelfth century. Showing

indirectly the influence of the Rhodian Sea Law it was accepted as the common maritime law in the countries on the Atlantic Ocean and on the Baltic; it was in use in the western Mediterranean countries and most of its provisions were adopted in the Baltic codes. The rules of the Rolls were followed in the local courts of London, Southampton and Bristol as well as in the courts of the English admirals in the fourteenth century; in 1647 the first General Assembly of Rhode Island (then called Providence Plantations) enacted that the Sea Laws, otherwise called the "Laws of Oléron, shall be in force among us"; and in 1779 when the state of Virginia created a court of admiralty a provision was made that it should be governed "by the laws of Oléron, and the Rhodian and Imperial laws," so far as theretofore in force in England.

As early as 1320 Wisby had a code of maritime laws which was in large part derived from the laws of Oléron. It does not appear to have been of any influence except in the north of Europe. The Consulate of the Sea (*Consolato del mare*) was compiled at Barcelona about 1340 and it is accepted as being of Catalan origin, perhaps of the middle of the thirteenth century. The Consulate was not a code established by public authority, for its provisions were not couched in imperative terms; it simply stated, explained or commented on usages. Translated into many languages it has had a tremendous influence in the western Mediterranean and in Italy. In the late fourteenth century the Hanseatic League began to adopt maritime ordinances; and as their number increased, codification became necessary. The first codification was made in 1447 and there were others in 1530, 1572 and 1591 under the auspices of Lübeck. This last code, printed in 1592 and translated into Dutch, was of much influence in the north of Europe.

The last of the great maritime codes is the French *Ordonnance de la marine* of August, 1681, one of the great achievements of the reign of Louis XIV. In France as elsewhere in continental Europe after the Middle Ages the maritime cities of importance had proceeded far toward particularism. The king intended to create a general and national maritime law conforming to the ancient customs but appropriate also to new needs. The code was ten years in preparation, for Lambert d'Herbigny, marquis of Thibouville and counselor of state, had been entrusted with the undertaking as early as January 1, 1671. His recommendations were deliberated upon by a commission at Paris, which sometimes con-

sulted the opinions of foreign juriconsults. The resulting *Ordonnance*, complete and methodical, opened a new era in continental maritime law, and many of its provisions are in force in France and elsewhere today. Upon its publication it was immediately translated into English, and its authority was very persuasive in England. As a codified statement of the generally existing customs of the late seventeenth century it was not infrequently cited in American admiralty courts until a generation ago.

The rise of the mediaeval commercial consuls has been briefly traced in the article dealing with the law merchant (*q.v.*). Consuls of the sea first appeared at Pisa late in the twelfth century; and the Pisan maritime court, originally a court of the Pisan maritime guild, was probably erected into a municipal court in the summer of 1200. It took cognizance of maritime matters, of disputes relating to freights and shipments, of loans and commercial documents connected with maritime affairs, of profits, losses, average and seamen's wages; of merchants, shipbuilders, carpenters and other tradesmen and artisans. Doubtless the court had jurisdiction over some of these trades only when they were concerned with maritime matters, because the test of its jurisdiction came to be based, like that of the modern American admiralty, on the nature of the cause rather than on the status of the individual.

It is particularly interesting to note that the prevalence of piracy was an important factor in stimulating the creation of maritime courts. Such courts were quickly established in many cities. At Barcelona the court created in 1279 was originally a guild court; by 1347 it had become a maritime court with an added court of appeal. Its existence is of importance from the Anglo-American viewpoint because of the influence which it must have had on the early English courts of admiralty. Indeed "The Judicial Order of the Court of the Consuls of the Sea" was incorporated in full in the English *Black Book of the Admiralty*.

If there was no true court of admiralty in England in the thirteenth century, the reason seems to be the backwardness of English commerce in this period. In so far as the mariners and merchants of the time desired a swift, informal and equitable justice they would have found it in the mediaeval English local courts, if these had not disqualified themselves by their primitive and insular dislike of foreigners. During the first half of the fourteenth century there

was a rising stream of complaints by foreign sovereigns to the king of England as to piracies and spoils committed by Englishmen at sea and as to the inability of the aggrieved foreigners to obtain justice. After attempts to remedy the state of affairs locally the only other possible alternative was to create a royal court, and sometime after 1340 and before 1357 the courts of admiralty were established. Thus to begin with they constituted a kind of department of state to settle dangerous international disputes. A more general commercial jurisdiction was claimed by the new courts and appeared by the end of the fourteenth century, but right up to the reorganization of the court in the early sixteenth century its jurisdiction appears to have been very limited. A large majority of all the cases were concerned with piracy, spoil and reprisal, all cognate subjects. Wreck and the admiral's droits would include most of the remainder. Such matters as seamen's wages, average and contribution, contracts, partnership, insurance and commercial paper were almost or quite unknown. The commercial cases of foreigners went to their own special courts; the commercial cases of Englishmen went to the local courts; the lesser and ordinary maritime cases went to the local maritime courts, of which there were many. The national courts of admiralty were distant, slow and inefficient, so that their early efforts to encroach on the local jurisdictions were easily repelled. Moreover the Cinque Ports and other important maritime cities managed to secure exemption from the admiral's jurisdiction for their local maritime courts. The Admiralty must always have been unpopular among the semi-piratical population whose activities it attempted to restrain. It was almost incessantly in some kind of conflict with the town courts. When it tried to extend its commercial jurisdiction the towns were powerful enough to restrain it by statute in 1389, 1391 and 1400. With the political breakdown of the central government in the latter part of the fifteenth century the courts of admiralty apparently ceased to be of much importance.

What the Court of Admiralty was and what it hoped to be at this time are reflected in the *Black Book of the Admiralty* compiled in the time of Henry VI from both earlier and contemporaneous materials. Its eleven documents roughly arranged in chronological succession are interesting in many ways. The third document shows that about the middle of the fourteenth century jurisdiction was claimed over contracts

made beyond the seas or within the floodmark. The fourth document is a copy of the Rolls of Oléron; the fifth is the Inquisition of Queenborough settling the jurisdiction of the admiral. The sixth shows that while the Admiralty was considering civil law procedure it was not in use up to the middle of the fifteenth century. The seventh, entitled *De officio admiralitatis*, shows that in actual practise in all criminal cases the common law presentment and inquest and jury trial were used. At this period the courts of admiralty were courts of record, contrary to the not too scrupulous opinions of Coke and others in the seventeenth century.

In the fifteenth century and even earlier there were other attempts to see that maritime justice was done. Sometimes the Council interfered and sometimes the Chancery. The Statute of Truces in 1414 removed piracy and spoil cases from the admiralty jurisdiction to that of the Conservators of Truces, who likewise proved to be ineffectual and lost their jurisdiction in 1450. About this time the nadir of the courts of admiralty was reached. Their substantive law of persons and causes was too limited and their common law procedure was too slow and too inefficient.

The reason which caused their creation helped their recovery. In the later fifteenth century piracy flourished more vigorously than ever before. With the ending of the Wars of the Roses and the accession of the Tudors tranquillity, a firm government and prosperity returned to England. The discovery of the New World changed all the trade routes and the commerce of England, which lay no longer on a by-way but on the main road, was vastly extended. Meanwhile the common law had been gradually expanding and quietly absorbing the local courts, whose power was definitely dwindling in the sixteenth century. The golden age of the English admiralty courts began under Henry VIII and they were given what they had never before possessed, a full commercial and maritime jurisdiction, as well as considerable criminal jurisdiction. Almost simultaneously the collegiate study of the civil law began, and the civilians immediately flooded into the revived court as judges and advocates.

During Elizabeth's reign, however, the common law courts began to attack the jurisdiction of the admiralty courts by issuing writs of prohibition. In 1575 an agreement providing for concurrent commercial jurisdiction was reached between the admiralty and common law courts,

but after 1606, when Coke became a judge, it was repudiated. From this conflict the litigants naturally suffered. Another agreement was concluded in 1632, partly diminishing but otherwise confirming the admiralty jurisdiction; and, oddly enough, although the common law triumphed as a result of the civil war, yet ordinances of the Commonwealth in 1648, 1649 and 1653 conceded to the admiralty courts a jurisdiction similar to that of 1632. After the civil war the ordinary courts acquired complete jurisdiction of commercial causes and most of the Admiralty's jurisdiction over maritime causes. Efforts supported by the merchants to restore the admiralty jurisdiction failed. Its civil jurisdiction was reduced to torts committed on the high seas, contracts made on the high seas to be there executed, some kinds of bottomry bonds, seamen's wages except where the contract was under seal, the enforcement of the judgments of foreign admiralty courts, salvage only when the property was not cast ashore and certain disputes between joint owners of a vessel. Once again and for a longer time the admiralty courts underwent a period of decline, until during the Napoleonic era Lord Stowell settled the principles of the prize jurisdiction of the Admiralty. Modern legislation, particularly in 1840 and 1861, restored to the English Court of Admiralty many of the powers and much of the jurisdiction of which it had been deprived in the seventeenth century; but nevertheless it may be said that the maritime law now administered there is no longer international but essentially English.

This was signaled in 1873 and 1875 by the incorporation of the Court of Admiralty with the other courts as a branch of the High Court of Justice. The Admiralty Division now has jurisdiction with process in rem of bottomry, cargo damage, collision, necessities supplied to a ship, salvage, ship mortgages and wages; process in personam may likewise issue in any of the foregoing matters and also in towage, in disputes between owners and in building, equipping and repairing ships.

But while the admiralty courts were declining in England they were entering upon a new lease of life in America. Almost as soon as colonization began, attempts were made, although unsuccessfully, to establish vice admiralty courts, primarily in order to protect the trade and fishing monopolies. In Massachusetts admiralty cases were at first tried in the ordinary civil courts, and the same was true in early Virginia and Maryland. The next step forward was made in

Jamaica, where as the result of widespread and almost uncontrollable privateering and piracy a vice admiralty court was set up in 1662, which soon exercised a wider jurisdiction than the English admiralty courts. After the Restoration there was a continuous effort to organize and maintain a colonial admiralty system. The basis of the American colonial admiralty jurisdiction was always the royal patent to the governor or the admiral's patent to the vice admiral or to the vice admiralty judge. These patents were widely drawn and purported to give a complete "civil and maritime" jurisdiction. In 1678 Sir Edmund Andros received the first of a long series of admiralty commissions for New York; as early as 1696 there was a vice admiralty court sitting in New York City; from 1715 on there are reports of many cases decided there. In 1697 the vice admiralty courts in the colonies were systematically organized; their jurisdiction was wider than that of the English Admiralty and particularly included the enforcement of the unpopular acts of trade. Judges trained in the civil law were so rare in the colonies as to be almost unknown, and some complaints were made about the unfitness of the provincial vice admiralty judges and their ignorance of the civil and maritime laws. So far as the New York reports show, however, the bar itself was ignorant of English admiralty practice and traditions until well into the nineteenth century. On the other hand, a simple American admiralty practice had developed in New York at least as early as 1760. There is no evidence of any attempt by any common law court sitting in that colony to issue prohibitions against the vice admiralty.

After the revolution most of the states erected their own courts of admiralty, usually continuing the older provincial courts. In succession to the old acts of trade the customs laws and similar laws were enforced in these courts. Pursuant to their policy of nationalizing commerce the authors of the federal constitution abolished these state courts and gave to the federal courts "all cases of admiralty and maritime jurisdiction." Since admiralty and maritime are by no means synonymous, this dichotomous phrase implies that the draftsman who used it not only knew something of the historic struggle between the English admiralty courts and the common law but also was acquainted with the wider jurisdiction exercised by the American vice admiralty courts and that he wished to avoid the former situation and to continue the latter. The records are silent as to any explicit intent. In the

Judiciary Act of 1789 Congress enacted that the admiralty and maritime jurisdiction should extend to all "waters which are navigable from the sea by vessels of ten or more tons burthen." Despite this hint the judges debated learnedly for some decades whether the mediaeval statutes restraining the English Admiralty had vigor in the United States; at last they held that the English restrictions were never applicable and that an American admiralty court's jurisdiction extended to all maritime contracts, torts and offenses; likewise that that jurisdiction was not limited to tide waters but extended throughout all the public and navigable inland waterways of the nation, including even interstate canals.

But the Judiciary Act of 1789 contained another clause, which has recently led to some difficulty: "saving to suitors . . . a common law remedy, where the common law is competent to give it." This has been construed as preserving the common law jurisdiction in many cases and as meaning that wherever there is concurrent jurisdiction the aggrieved party and he alone may select his forum. The Supreme Court has also stated a general rule to test whether or not jurisdiction is concurrent: if the cause of action is cognizable in the admiralty and the suit is essentially in rem against a thing itself, then even though process also is issued against the thing's owner, the proceeding is exclusively in admiralty; on the other hand, if the cause of action is not cognizable in admiralty or if the suit is essentially in personam against an individual, then even though there is an auxiliary attachment against the thing or against the individual's property in general, the proceeding is according to the course of the common law and within the saving clause of the statute.

The modern procedure in rem is the main-spring of effective power in the Anglo-American admiralty jurisdiction because there alone in modern jurisprudence can the title to a res be so utterly dealt with as to bind the whole world, whether or not the owner is a party to the action. The existence of a maritime lien and the right to proceed in rem are reciprocal. The maritime lien is very different from the common law lien, which exists only so long as the lienor retains possession of the res. The maritime lien is in the nature of a proprietary interest in the res, which arises simultaneously with the cause of action. Because of its secret nature it is *strictissimi juris* and is not to be extended.

Another difficulty of modern American practice involves the effect to be given to state stat-

utes dealing with maritime matters. While no state can confer jurisdiction on its courts to proceed in rem, a state can create new liens for matters enforceable within the admiralty jurisdiction. On the other hand, a state cannot make a contract maritime which is not inherently of that nature; nor can it create a maritime lien on a non-maritime cause of action. So far as the federal courts are concerned such a lien is held simply to be a non-maritime lien.

Of recent years, however, the Supreme Court has introduced a new test, which may result in the supremacy of the maritime law over much legislation. In 1917 that court held that the workmen's compensation law of New York was invalid when applied to the case of a stevedore killed while loading a vessel, because it created a substantive right of a maritime nature enforceable in a state court alone. The Judiciary Act of 1789, thought the court, did not preserve any common law rights but only a common law remedy. No state legislation affecting the substantive maritime law, said the majority, "is valid if it . . . works material prejudice to the characteristic features of the general maritime law or interferes with the proper harmony and uniformity of that law in its international and interstate relations" (*Southern Pacific Co. v. Jensen*, 244 U. S. 205, 216). Congress immediately attempted to remedy the matter, amending the act of 1789 by adding to the saving clause "and to claimants the rights and remedies under the workmen's compensation law of any state." In 1920 this amendment was held to be unconstitutional (*Knickerbocker Ice Co. v. Stewart*, 253 U. S. 149). Thereupon in 1922 Congress reenacted the amendment but excluded from its scope injuries to the master and the crew. In 1924 the Supreme Court again declared the amendment unconstitutional (*State of Washington v. W. C. Dawson*, 264 U. S. 219). It appears to be settled therefore that no state will be permitted to introduce any discord into the harmony of the general maritime law, but no legal ear is musical enough to catch all the possibly discordant tones in view of the vague generality of the new rule.

Just what is comprised in "the general maritime law" whose limits American courts of admiralty ascertain with complete independence under their constitutional grant of power it is difficult to say with precision. Certainly it includes all kinds of cases of which the provincial vice admiralty and perhaps of which the state admiralty courts had cognizance. Certainly also

the line to be drawn runs outside of that which circumscribed the English Admiralty in the late seventeenth century. Perhaps knowledge of legal history justifies the belief that the changing necessities of maritime commerce render it advisable that the legal horizon should not be too near nor too sharply defined, so that the maritime law can continue to possess its historic flexibility. In any case the American courts have said that they alone will determine the limits of the admiralty jurisdiction. Concededly Congress has exclusive power to legislate within the known boundaries, and therein its laws are supreme; but it cannot mark the frontier. The general maritime law to which the American admiralty courts look when they seek guidance is not, they have said, the maritime law of any one country, especially not the old maritime law of England, but is the general system existing by mutual consent in all the commercial countries of the world. Yet it has no inherent force of its own in America, where it is operative only in so far as it has been adopted by customs or by law.

The substantive American admiralty law is practically as complete as that of any country. Apart from statutory provisions as to the registry, enrolment, licensing, mortgaging, regulation, inspection, navigation, equipment, seizure and forfeiture of vessels it deals with the greatest variety of maritime contracts. The test of a maritime contract is its nature and subject matter, and the place where the contract is actually made is immaterial. A curious anomaly is represented by the rule that a contract to build a ship is not maritime while a contract to repair a ship is. Typical express maritime contracts are charter parties, which are constituted by the hiring of a vessel by her owners to others; contracts of affreightment, which exist when a vessel is operated by her owners on their own account; demurrage, the carriage of passengers and their baggage; and the carriage of goods, marine insurance, freight, wharfage and towage, the purchase of supplies and repairs and the making of advances therefor, masters' and seamen's wages and bottomry and respondentia, both of which are now almost obsolete. Bottomry is the borrowing of money by a captain in a foreign port upon the security of his ship in order to obtain funds to pay for repairs or other necessities that he may prosecute the voyage; there is, however, no obligation to repay the borrowed sum if the vessel is lost. Respondentia is a similar borrowing upon the cargo. Contracts implied by law

are the maintenance and cure of sick or injured seamen; pilotage where compelled by statute; salvage, resulting in the saving of vessel or cargo; and general average.

The application of general average is directly traceable to the ancient law of Rhodes. When by deliberately injuring or jettisoning cargo or destroying some part of the vessel, as, for example, cutting down a mast, the crew is able successfully to avoid serious danger to the ship, the property thus saved contributes proportionately to the property injured or destroyed, so that on a general average the loss is equally shared by all interests.

The test of a tort in the American admiralty is one of locality. The tortious act must take effect upon navigable water and possibly (this question is open) it must in some way be connected with the equipment, operation or discipline of a vessel. Typical maritime torts are collision, swell and suction damage, loss of or injury to cargo and personal injury to passengers, crew and stevedores when committed upon maritime waters. It should be noted that the common law doctrine of contributory negligence, which denies relief altogether when this factor is present, is not applicable to maritime torts. The damages are simply calculated in proportion to the degree of fault.

Several other matters do not fall exactly within the category of either contract or tort, as the rights and liabilities of co-owners of a vessel, who in the American admiralty are not regarded as partners but as tenants in common and are liable *in solido* for the debts or torts of the vessel, limitation of liability on the part of the owners of vessels, piracy, the barratry of the master, the discipline of the crew, overloading or unseaworthiness of a vessel and the stranding or wreck of a vessel. Some of these matters are dealt with as crimes.

Apart from statute or the existence of a special duty, such as that of keeping a vessel seaworthy, an injured seaman in the American admiralty was entitled not to damages but only to maintenance and cure. In the case of injuries resulting in death there was no liability at all, the admiralty in this respect following the peculiar rule of the common law. There was some relief, however, under the state statutes abolishing the rule and Congress in 1920 finally abrogated it in admiralty as to death on the high seas. Congress in 1927 also attempted to overcome the effect of the line of Supreme Court decisions limiting the operation of the state compensation

acts. Congress provided compensation for death or injury upon navigable waters if suitable recovery might not validly be provided under state law. Seamen were excepted because they preferred to retain their remedies under the maritime law and the Merchant Marine Act of 1920, which allowed them to maintain at their election an action under the Federal Employers' Liability Act applicable to railway employees.

Limitation of liability is one of the most strongly marked general features of the maritime law; serving to encourage maritime commerce it is of venerable age in the continental maritime law, but it is statutory in the American admiralty, as indeed it is in the English Admiralty. In England it goes back to an act of 1734; but the modern law, codified in the Merchant Shipping Act of 1894, rests upon acts of 1854 and 1862. In the United States the law rests upon statutes of 1851 and 1884, under which not merely when a disaster has taken place but after any act, loss or damage which appears to make it advantageous to him to do so a shipowner may limit both his maritime and non-maritime liability to whatever the value of his vessel or its wreckage may be after the occurrence of the act, provided that it occurred without his personal design, fault, privity or neglect. Insurance carried on the vessel need not be surrendered. Thus after the *Titanic* disaster the line operating the vessel limited its entire liability to about \$5000, the value of the lifeboats which were rescued. Such a privilege may have been justifiable when maritime disasters were frequent and when vessels were absent from their home ports for years at a time and cables and radios did not exist, but it scarcely seems socially expedient today.

For many years a three-cornered contest had been going on in admiralty between cargo shippers, shipowners and insurers, each trying to shift to the others liability for losses and damage. Bills of lading were drafted to give shipowners the benefit of the cargo shipper's insurance, and then the provisions of insurance policies were altered to prevent such a result. As between the cargo shippers and the shipowners a kind of equilibrium was reached by the passage of the Harter Act in 1893 at the instance of the shipowners. Briefly the act prohibits the shipowner from stipulating contractually to be relieved from the consequences of his own negligence, but if he has used due diligence to equip and man his vessel and to make it seaworthy, then he is relieved from liability for nearly all kinds of damage or loss. The act was substantially

enacted in Australia in 1904, in New Zealand in 1908, in Canada in 1910 and finally in England in 1924 (14 & 15 Geo. 5, c. 22).

It is not surprising that there is a large common element in the maritime law of continental Europe, since it was once based for the most part on the French *Ordonnance* of 1681. Like their mediaeval forbears the compilers of the modern codes of commerce, of which the maritime law usually forms one of the books, have continued to borrow and adapt freely provisions from the codes of other countries. A tendency toward further development has been displayed in South America. The French *Ordonnance* of 1681 inspired the Spanish ordinance of Bilbao of 1737 which, after amplification and improvement, was enacted as the maritime part of the Spanish Code of Commerce in 1829. This in turn strongly influenced the earlier codes of many South American countries. But more originality has since been displayed under Dutch and French influence.

While the Anglo-American maritime law has developed like the common law out of a vast bulk of cases decided in courts integrated with the ordinary judicial structure, with this body of case law augmented or modified occasionally by statutes, in continental Europe and in Latin America quite the opposite has often been true and the maritime law has developed more nearly according to the trend already clearly indicated in the Middle Ages. In many countries the maritime law continues to be administered in special courts of commerce whose jurisdiction is limited by both the nature of the action and the status of the litigant. As in the American federal courts it must then be shown on the threshold of an action that the court of commerce has jurisdiction; otherwise the litigation must be remitted to the ordinary civil courts. From such a situation delays and difficulties naturally arise.

In Europe the result achieved by the Anglo-American maritime lien is reached either by the granting of preferential privileges in payment, as in France, or by the right of a pledge of the vessel which is valid even when it is in the possession of third parties, as in Germany. The scope of these rights is more extensive than in the United States: for example, they further include obligations arising out of the building of a vessel, the salary of the captain, premiums on marine insurance policies and the wages of watchmen in port after the last voyage. Frequently a lien is given for collision damages, and

contributory negligence does not wholly bar a recovery: it only reduces the recovery proportionately to the quantum of negligence. Since the continental civil law did not refuse a right of action in case of wrongful death, no difficulty on this score has ever existed in the maritime law.

Seamen, "the wards of admiralty," are specially protected by all countries: the payment of their wages is privileged under all circumstances, their contracts are carefully safeguarded and if injured in the service of the ship they must be maintained and cured at its expense. The benefits of workmen's compensation acts were extended to them in European countries even earlier than in the United States.

In the British dominions a problem somewhat analogous to that precipitated in the United States by the constitutional requirement of "uniformity" in the maritime law has been caused by the Colonial Courts of Admiralty Act, 1890. This not only abolished the older colonial vice admiralty courts and declared that the legislative organ of any dominion might designate any court of unlimited civil jurisdiction as an admiralty court but provided that no greater jurisdiction could be conferred upon such a court than that possessed by the High Court in England. On the other hand, partial autonomy in some matters has been granted by the Merchant Shipping Act of 1894 (57 & 58 Vict., c. 60). The resulting situation has been very confusing. Is the jurisdiction of a dominion court of admiralty fixed at its extent in 1890? Does an extension of jurisdiction by the British Parliament automatically extend to a dominion? The Privy Council has held that it does not. May the dominion parliament then add to existing jurisdiction?

An international problem in maritime jurisdiction has arisen in recent years as a result of the government ownership of merchant ships. The principle of government immunity from suit has been often extended to such ships by decisions privileging them from arrest. The result has been to undermine the effective power of the maritime lien. Because of the sudden growth of government owned or chartered vessels operating in ordinary commercial trade after the World War the decisions have had an unfortunate practical effect, for there has been created a large class of vessels entirely irresponsible in the eyes of the law. The decisions have had their absurd side because each of the principal maritime nations permits itself to be sued in its own courts, at least in admiralty. Even the

American government, while not generally liable for its torts, has declared itself to be fully liable for them in admiralty. But an American whose cause of action arises in Boston harbor against an Italian vessel must seek his remedy in Italy. In the United States this situation could be corrected by a simple statute; no treaty would be necessary. Resolutions in favor of the abolition of state immunity were passed in 1922 by the international conference on maritime law at Brussels and in 1923 by the Gothenburg Conference in Sweden.

There have been many great changes in the conditions of maritime commerce in modern times, but the maritime law has by no means ossified; in some respects the power working for adjustment and a cosmopolitan uniformity today is greater than ever before. Uniform rules to govern general average, known as the York-Antwerp Rules, were worked out at a series of congresses from 1860 to 1890; they have been modified again of recent years. In 1889 an international maritime conference attended by delegates from twenty-seven of the principal maritime nations met at Washington and agreed on Rules of the Road at Sea and other matters. Such international conferences, which have become increasingly frequent, have done much to unify the rules in force in the various maritime nations. Usually the participants in these meetings have been those who are practically concerned with the matters involved, so that to a considerable extent the modern development of the maritime law goes on in accordance with its traditional method.

FREDERIC ROCKWELL SANBORN

See: LAW MERCHANT; COMMERCIAL LAW; MERCHANTMEN, STATUS OF; FREEDOM OF THE SEAS; TERRITORIAL WATERS; PIRACY; PRIZE; MARINE INSURANCE; SHIPPING; SEAMEN; JURISDICTION; COURTS; PROCEDURE, LEGAL; COURTS, COMMERCIAL.

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stance of International Legislation" in *Law Quarterly Review*, vol. xlii (1926) 25-36 and 308-16.

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MARK. See VILLAGE COMMUNITY.

MARKET. A market in economic parlance is the area within which the forces of demand and supply converge to establish a single price. It may be viewed geographically as a physical extent of territory, or it may be viewed as a more or less organized group of individuals whose bids and offers disclose the supply and demand situation and thereby establish the price. Popular parlance generally centers on the first view, economic theory on the abstract conception, although the two are frequently commingled.

Geographically the extent of a market may vary from a petty village within which the owners of housing space must find tenants to the markets for wheat, cotton and canceled postage stamps, which cover the civilized world. In general the size of the market for a given commodity is limited by the facilities for transportation. Non-perishable commodities of high value and small bulk cannot vary widely in price from one country to another; commodities, like fresh milk and hay, which are relatively difficult to transport may have only local markets or may have markets of national extent strung along the transportation lines, with isolated local markets in the hinterland. From the point of view of organization the market may vary from the fair, definitely regulated as to time and place, to the highly organized "order" market, such as the modern stock exchange, or the decentralized market of a mass production industry.

The market plays a central role in traditional economic theory. It is indeed the balance wheel of the economic system as viewed by laissez faire

economists. Under a regime of private ownership of the means of production and moderately free enterprise prices form the chief instrumentality for coordinating the activities of specialists and allocating to rival claimants the control of existing wealth. The effectiveness with which prices perform this function depends to a great degree on the efficiency of the market organization.

The price making process involves constant readjustment of quoted price to changing facts of supply and demand, and of production and consumption to changing prices. The price, or price structure, which would reflect most accurately the existing state of demand and supply, that is, the price situation which would emerge if no further change occurred in the conditions of supply and demand, is known as the equilibrium price. The core of the laissez faire tradition is the contention that the establishment of this equilibrium price would bring about the best allocation of specific goods and services which is possible in terms of the existing distribution of purchasing power. The perfect market is viewed as one in which there are no obstacles to the determination and establishment of the price which "clears the market"; any other price situation than this means that some individuals are left in possession of goods which they could exchange with one another in ways they would all regard as individually advantageous.

The modernist movement in economic theory has challenged this doctrine not so much in terms of its logical completeness and accuracy as in terms of its adequacy to solve pressing problems of public and private policy. It is necessary therefore to examine the equilibrium concept in some detail.

Two types of equilibrium price must be distinguished. The first is the equilibrium of the market for a limited supply of a commodity which is not being continuously produced for the market in significant volume; such commodities are shares of stock in going concerns, land, antiquities, buildings not of modern type and temporarily the supply of an agricultural product between harvesting seasons. The equilibrium price of such a commodity is expressed not by a single figure but by a pair of quotations, one the highest bid offered by a prospective buyer, the other the lowest offer made by a prospective seller. The width of the spread between the bid and the asked prices is an index of the stability of the existing distribution of ownership. When the bid price rises as high as

the asked price, trade takes place until there are no more holders who are willing to sell at a price as low as the highest bid.

On the other hand, in the case of commodities which are being produced currently and consumed currently the equilibrium situation is not stability of ownership but a steady flow of goods from the ownership of producers to that of consumers. The equilibrium situation is reflected in a single price, not in a pair of quotations.

The classical analysis of the function of the market is much more useful as an explanation of what takes place in the allocation of fixed supplies to potential holders than it is in connection with the more numerous cases where there is need for continuous exchange between producers and consumers. Were it not for the inertia of buyers and sellers, expressed in the spread of bid and asked prices, and the costs of sales a well advertised market situation would effect an ideal distribution of the ownership of these permanent elements in the world's wealth—ideal in the sense that the holders of a given commodity would be those whose valuation of it relative to other commodities was highest.

When it comes to the markets for goods which are in continuous flow from producers through middlemen to consumers, the case is very different. Instead of an allocation of existing goods to those who will pay the most for them the market's function is to keep goods flowing in a steady stream from those who can produce them most cheaply to those who are able and willing to pay the most for them, and in such volume that no would-be consumer shall fail to obtain a supply so long as anyone who could afford to produce at this consumer's price remains unemployed. All parties to the market process have a stake in future prices which outweighs their immediate interest in buying or selling the existing supply on the most advantageous terms.

The theory of the perfect market fails to approximate the actual market situation most frequently with regard to the seller's actions, chiefly because production is more highly specialized than consumption. The conflict between the seller's short run interest in clearing the market and his long run interest in "protecting" it constitutes the problem of "price policy," a concept quite foreign to equilibrium economics. Advertising and salesmanship are utilized not merely to facilitate the flow of goods through the market process but to create a different demand situation for the future. Price policy comes into being as soon as the seller attains

such a position of control over the flow of goods that the essential question becomes that of the wisdom of forcing his entire supply on the market at any price he can get (of course above its value for his own uses). Whether the monopoly arises from control of the physical sources of supply, as in the case of diamond mines, or merely from the special value of a trade name due to past satisfactory performance or past advertising is immaterial. In either case the seller's market position must be viewed in terms of a series of transactions, and the level at which he is willing to price his wares will be that which promises the highest net return over the life of his business. This will not except by accident be the same as the equilibrium price of a given supply which would result from "perfect" competition. It may be lower—if the producer has decided to build a reputation for cheapness. Some prominent retailers go so far as to meet all competitive price offers on standard goods regardless of cost. More often it is higher, since the gain from a price somewhat above that which yields a maximum number of sales will ordinarily offset the loss from decreased volume. The producer may find it better to waste part of his stock or to suffer temporary or partial unemployment than to educate his customers to the possibility of lower prices. Goods are dumped outside the customary market for any price which can be had or even destroyed rather than allowed to "spoil the market."

Price policy always implies some degree of monopoly, but under modern conditions some degree of monopoly nearly always exists, at least on the side of production. It is becoming very difficult to find any important commodity the price of which is not greatly influenced by the policy of a few large sellers. There may be a great number of competitors, but the small man finds it to his advantage to let the big man make the price. The market comes to be less and less a reflection of the relationship of producers' costs and consumers' desires. Rather it reflects the decisions of a comparatively small number of individuals as to the probable results of one or another policy pursued over a considerable time without much regard to the immediate market situation. The chief exception until recently has been the case of the great agricultural staples which were produced by so large a number of small scattered producers and are of such a highly standardized character that price policy has seemed to be impossible. Throughout the world, however, the tendency in recent years

has been to concentrate in this field too the control of the sellers' price decisions in comparatively few hands—either through cooperatives or through governmental interference.

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See: ECONOMICS; PRICE; VALUE; DEMAND; SUPPLY; COMPETITION; MONOPOLY; LAISSEZ FAIRE; MARKETING; FAIRS; BARTER; AUCTIONS; MARKETS, MUNICIPAL; COMMODITY EXCHANGES; STOCK EXCHANGE; MONEY MARKET; MIDDLEMAN; SPECULATION; ORGANIZATION, ECONOMIC.

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MARKET GARDENING. See FRUIT AND VEGETABLE INDUSTRY.

MARKET INFORMATION. See CROP AND LIVESTOCK REPORTING; BUSINESS, GOVERNMENT SERVICES FOR.

MARKETING. As an economic concept the term marketing is susceptible of various interpretations. A common but fallacious theory is that it is concerned chiefly if not wholly with finished goods and is the activity of a specialized class of middlemen or that it is limited to adding time, place and possibly possession utilities to completed goods. The marketing process is infinitely more far reaching than the transfer of goods from manufacturers to final consumers. Even considered only in terms of material things it begins much earlier, as early indeed as the first movement of raw materials. Iron ore is marketed to the smelter; billets of pig iron in turn to the foundry; the foundry's product of castings to the automobile manufacturer, who in turn sells cars to dealers, from whom consumers buy.

Marketing is also involved when the day laborer negotiating for a job offers to sell his services. For the marketing of labor there have been set up employment exchanges both public and private, and buyers of labor power have established elaborate mechanisms for its purchase. Similarly, the securing of funds for industrial and, excepting taxes, for governmental uses as well is a marketing process. The use of funds

is bought and sold in a variety of markets and by a variety of institutions and persons—commercial banks, investment houses, insurance companies and others. Funds markets, however, should not be confused with the stock exchanges, which are essentially places for buying and selling the used equities in already existing productive enterprises.

Also inadequate is the conception of marketing as the means by which goods are transferred from localities with a surplus to localities having a deficiency. Such a view remarks an obvious but only a secondary fact. It fails to see that it is the existence and organization of marketing activities which cause the so-called surpluses that marketing disperses. Such surpluses are not, except occasionally, accidental; they are intentional. Farmers do not by accident raise thousands of bushels of wheat, large droves of livestock or carloads of fruit. Contractors do not by accident build hotels and apartment houses. Nor do mine operators open by accident extensive veins and then, finding themselves with a surplus, seek to sell what they do not want. People do not become physicians, lawyers, brokers, stenographers, brick masons or aviators unconsciously and then seek to find a market for their laboriously acquired abilities. These surpluses of goods or ability beyond the individuals' desire to consume are built up because those concerned believe that there is a marketing mechanism which will enable them to exchange their products or specialized services for a larger portion of food, clothing and other desirable goods and services than they could obtain by direct production. Such surpluses are but a necessary part of specialized production. It is obvious that financing, an advance of at least sustenance, in monetary form or otherwise is necessary to specialization. Specialization in an institutional setting such as obtains in the western world exists because of marketing devices.

Exchange of goods occurs in the most primitive of societies and trade between nations has flourished throughout history, but under modern capitalism marketing has become not only all pervasive but central to the whole economic system. For marketing to attain this position, certain institutions are prerequisite. The most important are private property—both in goods and in one's own person—freedom of contract and diffusion of property rights. If property rights are highly concentrated there will be little occasion for exchange through marketing; in a slave or strictly communal society, the advan-

tages of specialization will be achieved by some other means.

Given these basic institutions, certain devices are necessary to carry on the specific economic activities which constitute marketing. First there must be devices for accomplishing transfer of ownership. In a developed form this implies a vast system of law and recording. Equally fundamental are mechanisms for price determination. Prices can be determined by the higgling of individual buyers and sellers, but this is usually least costly when aided by such facilities as those provided by commodity exchanges or one-price marketing systems. The price mechanism is itself dependent on the existence of a unit of valuation, making possible a rational appraisal of various costs and their comparison with anticipated selling prices; transport organizes specialization through space. Storage organizes it through time. Basic also to organization of specialization by marketing is widespread information concerning the activities of specialists and concerning the existence of supplies, desires, methods of transport, protection and finance and localities in which trading can be done to advantage. Agencies for fixing standards of quality and for grading represent subsidiary aspects of the information function in the modern marketing system. Finally, a marketing system is dependent upon a proper ideology. It will be greatly restricted in its scope by the prevalence of certain kinds of religious ideas or of strong nationalist or localist feelings.

Marketing activities have been found by anthropologists among primitive peoples everywhere. Exchange among such groups is sometimes ceremonial, sometimes purely economic in nature; and specialized products may be traded in—through barter—over wide areas. Throughout history there have been few groups so separated from the rest of the world as not to be touched by marketing activities. But marketing as a system of economic relationships appropriate to specialization and diversified private ownership is of course not to be found in social and economic systems based on communal living or on slavery and subsistence from concentrated landownership. The most important type of marketing in the ancient world was that between countries. It was chiefly a trade in luxury goods. Babylon, Crete, Phoenicia, Arabia and to some extent Rome rose to greatness on the movement of trade between peoples (*see* COMMERCE). This trade was facilitated by coinage and by banking machinery, regulated by

legislation, supported by treaties, protected by armies and navies, encouraged by the state as a source of income and general prosperity and often aided by official representatives comparable to modern consuls.

Domestic trade was by no means absent from the ancient world. In Athens merchants were classed as wholesalers—usually importers and shipowners—and retailers. The latter operated within single cities, selling their wares in small shops or in booths in the “markets.” In the larger cities the sale of particular goods was encouraged by the establishment of special markets. Hawking about the streets was common, and the rudeness of fishwives had already become a proverb. In the days of Athens’ greatness middlemen were already regarded as profiteers, and regulations were repeatedly passed to limit their operations.

The trade life of Rome was a vast mixture of the military, the administrative and the more narrowly commercial. But there was keen discernment as to the nature of exchange in the observation that Rome exported legions, lawgivers and the blessed *pax romana* and took in return tribute of the world. Rome was provided with a “wilderness of shops, grocers’ stalls, milk dealers, and wine shops.” The Forum itself originated as a market place. In Hadrian’s day there were two great shopping districts for Romans outside the fora, one for the plebeian trade struggling for bargains and another with the “finest retail shops in the entire world.”

Ancient trade operations were, however, meager indeed when compared with modern marketing. While city life necessarily required a marketing organization for supplying food and drink, it was only the more valuable articles which could bear the costs of shipment to a great distance, and up until the industrial revolution marketing touched only lightly the processes of production of the great bulk of goods and services.

While many of the patterns basic to the modern marketing mechanism were cut in antiquity, more were supplied by the growth of trade in northern Europe, particularly its expansion in England following the break up of the manorial system. Under the latter economic life was communal in the sense that the community worked together; and division of the fruits of industry on the manor, villa or great estate was rather by customary regulation than by exchange. Although mediaeval Europe was decidedly non-commercial, yet some marketing activity existed

throughout the period. Important in its organization were the merchants of the Italian cities, whose fleets brought the products of the Orient to the north. At a little later period the Hanseatic League rose to a position of dominance in the trade of the north. Fairs and markets were the chief trading institutions of mediaeval life. The first were periodic or occasional. They were sources for wholesale buyers and outlets for merchants from a distance as well as points for consumer purchase. Their beginning was religious, growing from the assemblies of pious worshippers who congregated around famous shrines on the feast days of saints. The church in giving protection greatly facilitated their development, the market cross becoming the emblem of peace for trade. Within national boundaries a market was usually established by royal grant or under the protection of some religious order. Market towns furnished points where goods purchased from fairs could be distributed or where exchange between country and town could readily take place. Markets like fairs were periodic but more frequent, weekly or semi-weekly. Conflicts of market towns as to the proper distance between them—interesting forecast of modern discussions of marketing areas—were numerous. In the larger towns shops and stalls, the machinery of markets, were continuous appurtenances. The peddler was common in the Middle Ages, carrying the wares of craftsmen or fairs to more remote points of sale. Peddler, shopkeeper, merchant, this was the commercial hierarchy, the larger merchants forming in parts of Europe an aristocratic class important in social and political life.

The ideological environment of the Middle Ages, however, was restrictive to marketing. The advantages of specialization were imperfectly realized, and the fallacy was prevalent that the trader took something for nothing. Certain types of trade were prohibited as immoral, the ground being in the case of funds that loaning took advantage of necessity. Prices, particularly for foods, were commonly regulated.

The rise of marketing as the functioning of a series of mechanisms which coordinate economic production, determine its direction and make possible a high degree of specialization is simply illustrated in those changes which took place in the woolen industry in England in the declining days of the guilds and prior to the coming of steam power. The first enclosure movement increased the supply of wool and of labor. With the decline of the guilds England presented an

economic setting in which merchant-manufacturers found it possible to purchase wool, to employ in the workman's home or small shop spinners, weavers, dyers and others necessary to specialized cloth production and to sell the product in a market with which these workers had no contact. In such a sale of their specialized activity there was a better living to be gained by the workers than they knew how to obtain otherwise. The merchant became the integrating factor in the entire process of cloth production and sale. A similar transformation was gradually occurring in other industries; for instance, by the middle of the seventeenth century the merchant dominated the silk industry of Lyons; but the change came earliest in England, where all the requisites for sustaining specialized production organized through buying and selling were rapidly coming into existence in the sixteenth century. By the middle of that century it was legal to charge interest for money if the rate was not higher than 10 percent. By 1638 the outlines of a post system provided the basis for rapidly carried information—not only letters but newspapers, the first of which had appeared some seventeen years before. By 1667 insurance against certain risks could be bought from organized companies. Almost as early regular lines of wagoners sold transport. For aid in passing goods on to the consumer, manufacturer-merchants found special dealers quickly arising to offer their services. It was through such changes that there came into western economic life that system of organizing industry which is called the business system. A business system is essentially a marketing system.

Any description of the contemporary system of marketing must of necessity be sketchy because of the amount of material to be covered. In the first place it must consider the methods of marketing of a number of different classes of goods: raw materials, such as ore, coal and timber; semimanufactured goods, such as steel sheets and bars; manufactured parts, such as castings, shapes and bolts; goods, as yet unused, for personal consumption; goods partially consumed, resold for further consumption; and, finally, equipment used in manufacture and distribution, such as power plant and factory machinery and office and store fixtures. Any of these classes of goods may be marketed either from the owner directly to the consumer or to the user for further production; through organized exchanges; through auctions; through cooperative organizations; or from the owner to and

through trading intermediaries, such as wholesalers, retailers, commission men and brokers.

No one of these methods is applied solely to any one class of goods. Certain general correspondences are, however, to be observed. The commodity exchange (*q.v.*) has been most frequently used in the marketing of raw materials, particularly agricultural products. Auctions (*q.v.*), in many ways similar to organized exchanges but typically operated by private companies, function importantly in the wholesale selling of fruits, of wool—particularly in Australia and England—and in the fur trade. Auctions are also important in the resale of partially used articles of many descriptions. Co-operative marketing organizations have developed in the United States chiefly in the sale of agricultural products—citrus fruits, cotton, wool and livestock. In Europe co-operative stores play an important part in almost every field and wholesale cooperatives link producer and retailer. Co-operative retail stores have never become of great significance in the United States, but co-operative buying has in recent years become a prominent aspect of retailer-wholesaler organization, particularly in the grocery and drug fields.

Direct selling is of some importance in both Europe and the United States in the marketing of goods to final consumers but is far more extensively used by manufacturers in selling equipment, semimanufactured goods and parts to other manufacturers and by wholesalers in reaching retail outlets. In all of these cases the salesman typically appears as an intermediary agent of the seller. Direct selling also still plays a considerable role in the marketing of fruits and vegetables in cities, where growers sell to consumers in markets similar in many ways to those of mediaeval days. Not only has peddling not disappeared from the rural and suburban districts, but it is widespread in the house to house sale of widely advertised products.

The trading intermediaries fall into two major classes—wholesalers and retailers. Most changes in the marketing system have come about through the emergence of new types of wholesaler or retailer and in the shifting of their relationships to one another. The wholesale intermediaries fall into two main groups. Certain of them, such as wholesalers and jobbers—not always distinguishable in certain trades—purchase from manufacturers or other producers typically for the purpose of resale to retailers. Others, such as commission men, brokers

and manufacturers' agents, acting as independent enterprisers sell goods for manufacturers, refineries, farmers and other producers but do not actually take title to the goods (*see WHOLESALE*).

The chief classes of retailers are independent retailers, chain stores (corporate and voluntary), department stores, mail order houses, and for Europe co-operative retail stores should be added to the list (*see RETAIL TRADE*). The chain store, mail order house and department store are, from the point of view of their buying, wholesalers as well. The term independent retailers is usually employed to designate a retail organization limited to a single unit, commonly located in a residence neighborhood, selling consumer merchandise, usually of one general class, such as groceries or drugs. In the last respect it differs from the independent general store handling the whole range of consumer products from notions to heavy hardware, which was once the common type and which still exists to some extent in rural districts. The outstanding development in the field of the specialized trading middlemen during the past decade has been the growth of the corporate chain store, a series of unit outlets in one or several cities owned and directed from a central office. Outstanding features of chain store development have been the decreasing "service"—delivery and credit—offered and the standardization in equipment and, in large degree, in goods handled. The success of corporate chain stores has led to the development of so-called voluntary chains. The term voluntary chain is applied to a number of types of organizations: co-operative retail groups joined informally for advertising or purchasing; retailer owned wholesale establishments; wholesaler organized and sponsored groups of retailers; and groups of wholesalers or retailers organized by outside agencies.

The department store made its first appearance in Europe and developed in the United States during the latter half of the nineteenth century, until it has become an accepted institution in most cities of any size. Within the past few years chains of department stores have developed, in some cases into enormous organizations. The mail order house began as a store soliciting orders by catalogue and receiving orders by mail, chiefly from small town and country buyers. In recent years the advent of good roads and automobiles has made the possibilities of urban shopping directly competitive to mail order business and has impelled the

larger mail order houses to establish chains of retail outlets within cities. These concerns have therefore become in part chain stores.

The rapid and dramatic growth of chain stores and the increasing number of mergers gave rise, in the period before 1929, to predictions of the ultimate disappearance of the independent merchant. Figures published by the United States Census of Distribution indicate, however, that even in 1929 nearly 21 percent of all persons engaged in wholesaling and retailing in the United States were individual proprietors or members of firms. In certain European countries, particularly in France, the proportion would probably have been considerably higher. Since 1929 it has not only become evident that the independent unit may have definite economic advantages, but there has been a tendency for such advantages to be safeguarded by legislation inimical to the chain groups. The issue is by no means settled. The larger units in the department store and mail order fields, followed by the larger chains, were first to apply advanced methods of accounting control, personnel administration, specialized buying and mechanized operations. Ways have been found, however, to make the advantages of most of these techniques available to smaller enterprises.

Quantitative information as to marketing and the marketing process is extremely sparse and must remain difficult to obtain because of the very complexity of the subject, the vagueness of its delimitation and the rapidity with which conditions in the field change. In the United States every census has included some information on trade occupations, but not until 1930 was a Census of Distribution taken. This is the most complete survey of marketing available for any country. Since 1912 the Harvard Bureau of Business Research has been making studies of distribution costs for particular industries, and in recent years business research organizations in other universities have undertaken similar surveys. The United States Bureau of Foreign and Domestic Commerce also has published a series of distribution cost studies since 1928. In Germany the Ausschuss zur Untersuchung der Erzeugungs- und Absatzbedingungen der deutschen Wirtschaft has been publishing since 1927 a series of studies of German economy, one group of which deals with marketing, and a semi-official organization in Berlin, the Forschungsstelle für den Handel, issues reports on various aspects of marketing. In addition occasional studies have been made by governmental

departments in other countries, as, for example, those by the Ministry of Agriculture and Fisheries and the Empire Marketing Board in Great Britain.

From these sources it is possible to construct some kind of picture of the position of marketing in the modern economic system. The United States Census of Distribution for 1930 indicated that, in 1929, 7,716,561 persons, or nearly 16 percent of all those gainfully employed in the United States, were engaged in wholesale and retail trade. Of these 6,020,747 were in retailing, 1,510,607 as proprietors and firm members (not on pay roll), 3,833,581 as full time employees and 676,559 as part time employees. The remaining 1,695,814 persons were engaged in wholesaling, 90,772 as proprietors and firm members (not on pay roll) and 1,605,042 as employees. Comparable figures for earlier years are not available, but a rough measure of the number of persons engaged in marketing is given by Census of Occupations figures. If the census classifications of agriculture, forestry and fishing, extraction of minerals and manufacturing and mechanical industries are grouped as production occupations, and transportation and communication, trade and clerical occupations as distribution occupations, the personnel in distribution or marketing constituted 25 percent of the total for the two groups in 1910, 30 percent in 1920 and 35 percent in 1930. It is to be noted that for the last year this classification indicates that approximately twice as many persons were engaged in distribution as were included in wholesaling and retailing occupations as reported by the Census of Distribution. While exact comparison is impossible, figures for European countries indicate a similar trend toward an increase in the number of persons engaged in marketing activities. Thus the League of Nations, Economic and Financial Section, *International Statistical Year-book, 1929* (Geneva 1930) reports that for Germany in 1907 8.7 percent of the total gainfully employed were engaged in "commerce" and in 1925 11.7 percent; for France in 1911 9.8 percent were engaged in commerce and in 1921 10.4 percent. Later figures, while computed on a different basis and not directly comparable, show a continuation of the same trend.

Another indication of the relative importance of marketing is the total sales involved. The 1930 Census of Distribution reported for 1929 in the United States as a whole 1,543,153 retail stores and 169,702 wholesale establishments.

Annual net sales of retail stores in that year were reported to be \$49,114,653,269, and the annual pay roll \$5,189,669,960. For wholesale establishments annual net sales for 1929 were \$69,291,547,604, and the annual pay roll amounted to \$3,010,129,535. The total selling value of goods distributed by manufacturing plants in 1929 was \$63,409,200,000.

A rough quantitative analysis of the flow of goods from manufacturers to the several types of consumers is possible also. This table dis-

DISTRIBUTION OF OUTPUT OF MANUFACTURING PLANTS
IN THE UNITED STATES, 1929

	Percent- age
To industrial consumers	31.3
To manufacturers' own wholesale branches to industrial consumers	5.7
To wholesalers to industrial consumers	7.0
To manufacturers' own wholesale branches to wholesalers to industrial consumers	0.8
Total to industrial consumers	44.8
To home consumers	2.5
To manufacturers' own retail branches to home consumers	1.9
To manufacturers' own wholesale branches to home consumers	0.1
To retailers to home consumers	18.6
To manufacturers' own wholesale branches to retailers to home consumers	6.9
To wholesalers to retailers to home consumers	22.6
To manufacturers' own wholesale branches to wholesalers to retailers to home consumers	2.6
Total to home consumers	55.2

Source: Derived from United States, Bureau of the Census, *Fifteenth Census, 1930; Census of Distribution: Wholesale Distribution* (1933) 33-35.

regards the transactions of such middlemen as brokers and also the sales of wholesalers to other wholesalers and of retailers to other retailers. It is significant that nearly half the goods manufactured are marketed to industrial users.

From certain points of view it is helpful to classify goods sold into, first, those which are marketed through organized exchanges and, second, those which may be said to be marketed administratively. In the first group the purpose of the marketing machinery is to fix a price which will clear the market. It is of this group that value theorists have been chiefly aware. The second group includes those goods upon which a price is fixed by the seller, at least for a considerable period of time, and for which sales efforts are used to clear the market at the fixed price. It is in connection with the second class of goods that the bulk of advertising, although

by no means all of it, and other types of so-called high pressure selling are employed. While the organized exchanges are frequently commented upon adversely, the administrative type of marketing has been subject to rather clamorous criticism, particularly in recent years.

The cost of marketing has always aroused some suspicion, but whenever costs of living press hard on the available incomes of a large proportion of the population this suspicion is intensified. Since the World War the widening spread in almost every country between indices of wholesale prices and the indices of costs of living has been regarded as tangible evidence of undue distribution costs. Although much has been said in recent years even in official circles of the wastes and increasing costs of marketing, statistical evidence is almost unavailable. The most conscientious efforts to compare present with past marketing costs are balked by the fact that valid series of data are meager and that rapidly advancing technology and swiftly changing standards of materials, styles and services of retailers make what is purchased even under the same name extremely variable from year to year. While they show nothing as to trends in marketing costs, the most complete figures of distributing expense, those of the United States Census of Distribution, showed the costs of retailing to be 24.83 percent of total sales and those of wholesaling to be 8.85 percent of sales. Perhaps more significant are figures for limited classes of business. The Harvard Bureau of Business Research has compiled a record of operating expenses of department stores for twelve consecutive years; according to these studies operating expenses in terms of percentage of sales show an increase from 25.9 percent in 1920 to 34.5 percent, 35.9 percent and 36.0 percent for stores with a turnover of less than \$500,000, from \$500,000 to \$2,000,000 and \$2,000,000 or over respectively, in 1931 (*Bulletin*, no. 33, 1922, and no. 88, 1932). A somewhat similar study of German department store costs made by the Ausschuss (III, 9, vol. i, p. 207) shows a similar trend. Average costs expressed in percentage of volume of sales increased from 24.7 in 1913 to 27.2 in 1926 for stores with yearly sales of over 10,000,000 marks and from 16.6 percent in 1913 to 19.9 percent in 1926 for stores with yearly sales of under 250,000 marks (the largest and smallest groups reported).

All such figures, however, must be viewed with caution and analyzed with care. As a measure of efficiency, costs expressed as a percentage

of selling price may be deceptive when applied to a series of years, since changes in the value of the dollar may not be reflected identically in selling prices and in costs. Increases of advertising expenditure may indicate an added cost or the utilization of a form of hawking more economical than personal selling. So too the multiplication of persons in mercantile activities may be interpreted entirely in terms of increased marketing costs, or may be viewed as evidence of the intensification of specialization. The former interpretation, if used without further evidence, is analogous to the assertion that the coming of the railroads, which added thousands of middlemen, was an uneconomical development.

Administrative marketing methods may be criticized further in that they constitute tools by means of which those financially interested strive to cut the patterns of culture. That they so strive and to a degree succeed is certain. Whether this is bad or good is less certain. It is part of that freedom of expression in political, religious and economic life which is regarded by some as among the chief triumphs of modern civilization. In terms of the present mores one may say of economic persuasion that like political and religious persuasion it should be controlled to the extent that those interested in its control can control it. Short of violence, they are largely limited to the means which it itself employs. A general criticism of marketing is a criticism of the business system of which it is not only the spirit but most of the body.

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See: MARKET; WHOLESALING; RETAIL TRADE; COMMERCE; INTERNATIONAL TRADE; AGRICULTURAL MARKETING; BARTER; GUILDS; MARKETS, MUNICIPAL; AUCTIONS; FAIRS; COMMODITY EXCHANGES; STOCK EXCHANGE; BROKER; STORAGE; WAREHOUSING; GRADING; FOOD INDUSTRIES; MERCANTILE CREDIT; RETAIL CREDIT; INSTALMENT SELLING; MIDDLEMAN; SALESMANSHIP; ADVERTISING; STANDARDIZATION; SPECIALIZATION; PRICE DISCRIMINATION; RESALE PRICE MAINTENANCE; BUSINESS, GOVERNMENT SERVICES FOR.

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MARKETS, MUNICIPAL. Modern city markets have several important functions besides the obvious one of bringing sellers and buyers together. These functions operate largely in the field of food distribution, for most modern American and European markets concern themselves only incidentally with other products. A market or a series of markets in any city today is likely to be merely one of many local agencies for supplying foods. But it is a distinctive agency. In the aggregate it deals with relatively large quantities and with many buyers and sellers who are thus brought into contact. If it is a municipal market some of its expenses are met by the city; if it is a private market the charges to the individual dealer or stand holder are likely to be less than the overhead of a dealer who occupies his own quarters.

Once a municipal market is firmly established it can reasonably be expected to render certain definite services. First, prevailing prices, as far as consumers and producers are concerned, are likely to reflect the saving made possible through free selling space or low rent for stall and equipment, through possible reductions in overhead expense and through the elimination of some handling, intermediate selling and transportation costs. Second, the market is in a position to offer customers a larger, fresher and more varied assortment of products than can the average private establishment. Third, it provides local truck farmers and fruit growers with a satisfactory outlet for their miscellaneous products and therefore helps in the development of a neighborhood food supply. Fourth, it can give consumers increased protection with regard to quality, weight and measure because of the practicability of closer official inspection. Finally, it is better able to give to customers who pay cash and who carry home their purchases a full dollar's worth of products for every dollar they spend.

Some large markets perform other functions. If dealers are allowed to rent stalls they often sell to hucksters, who carry the wares into residence districts and dispose of odd lots of perishables at reduced prices while selling their usual foods. In this way temporary surpluses of perishables can be absorbed more readily than through stores. Perhaps of even greater significance is the fact that large markets, whether retail or wholesale, act as price indicating agencies for their localities. Because of the large number of buyers and sellers who meet here very early in the day the potential supplies and demands are made known and prices tend to reach an adjusting level, which is reflected to some degree throughout the town.

There are many kinds of markets in the United States. Several logical classifications might be made: those which are publicly or privately operated; those which sell at wholesale or at retail; those which are residential or terminal; or those located in buildings or in open market places. Again, they may be classified by commodities, such as fruit and vegetable markets or livestock markets. Whichever classification is adopted, however, modifications are bound to exist. A community may possess a municipal wholesale market and a privately owned retail market; or it may give partial support to both wholesale and retail markets at separate points or in combination; or one of its markets may be open and

another enclosed or both may be open markets or enclosed.

Because of the varying degrees of civic support the term public markets is increasingly used to designate all markets of a generally public character regardless of exact ownership. There has been no census of public or municipal markets since 1918. The figures in that report, covering only cities with a population of over 30,000, showed 237 municipal markets in 128 cities. The majority of these markets were of the open type, including some without sheds, and provided 17,578 stands primarily for farmers. Enclosed markets, on the other hand, provided a total of 7512 dealers' stands. The total value of municipal market property was reported as being \$28,000,000 while the aggregate funded or floating debt of municipalities chargeable to their public markets was \$7,000,000. Strictly municipal markets are evidently decreasing in number, but there are no statistics to prove that the total number of markets enjoying some public support is declining.

The nature of this public support and the administrative agencies in charge vary. A city may own and manage a building fully equipped with stands to be used free by farmers. Again, it may own the building and equipment, renting stands to farmers and perhaps to dealers. Or a city may own the building and lease it to a market company, which then leases the stands to producers and perhaps to dealers. Finally, a city or county may permit the free use of a curb site by farm families and perhaps by dealers. There are still other arrangements, but in practically all of them both the municipalities and the farmers play the chief roles except in these few cases where a non-profit organization, like a county farm bureau or a chamber of commerce, contributes the management, space or building. Some of the very small markets in more or less rural areas are perhaps among the most useful and successful, if measured by the need for the service rendered to both farm families and consumers. Many municipal markets refuse to allow dealers to do business within their space, but other municipal market directors support the practise. These directors lease to dealers and encourage sales to grocers, hucksters and other retailers on the ground that the handling of this greater volume and the wider distribution thus obtained will make the market a more valuable agent for the provisioning of the city.

The result has been that the primitive market

place once used only for simple barter between farmers and housewives has now, in some instances, become a great combination wholesale and retail market, sometimes even possessing railroad terminal facilities and fish wharf adjuncts. A small grower may still sell at a stand occupied by three generations of his family direct to a housewife whose family may have bought at that stand over a similar length of time. In another part of the plant large wholesale transactions may take place, through a commission merchant, between a distant large scale shipper and another large dealer; or the merchant may break up the shipment and sell it to a dozen buyers—retailers and hucksters from uptown; or the merchant may sell half the shipment and place the other half in a cold storage warehouse maintained by the market to be sold at a later date. Such developments were more or less inevitable as growing cities demanded more and more food at the same time that they were pushing the farming areas farther from the town center. Meanwhile new and far distant farming lands were coming into use, with modern systems of refrigeration and warm and cold storage to make possible the year around use of many once seasonal products.

Since early times market places have played an important part in the life of society. The first markets in England and on the continent were of feudal origin and many have continued in private hands, as in the case of Covent Garden in London. It was not until the nineteenth century that municipalities or governments began to participate. Large European markets have been famous points in their respective cities. Besides being the chief provisioning agencies they have been centers of trade, communication, information and recreation for a wide area. Many are still vital organisms, although their traditions are centuries old. The market building (the Halles) at Bruges is one of the oldest and most interesting of that ancient city; its leaning tower is famous throughout Europe and its carillon still stirs the sleepy atmosphere each quarter hour of the day. Other famous markets of Europe include Billingsgate and Smithfield in London, the Halles Centrales in Paris, the Central-Markthalle in Berlin and the markets in Liverpool, Manchester, Lyons, Vienna and Budapest.

Some old American markets are equally well known. The French Market of New Orleans, now somewhat modernized, is a landmark of the old south. Center Market in Washington, D. C.,

planned for by George Washington, was operated until its removal in 1931 to make way for improvements in the Mall. During the last few years it was under the supervision of the United States Department of Agriculture and did an annual gross business of \$10,000,000. Washington and Fulton markets in New York City, Wallabout Market in Brooklyn, New York, Lexington Market in Baltimore and Faneuil Hall Market in Boston are other such centers which have for years been intimately linked with the lives of their communities.

Because public markets had once been a necessity it was inevitable that they should gain a firm place in the American economic scheme. As the United States became increasingly industrialized and urbanized, the faults of a marketing machinery which had not kept pace with the new developments became more and more evident. Particularly did the problem come to the fore after the turn of the twentieth century. In addition the very considerable concern over the possibilities of a failing food supply and the high cost of living in large cities turned the attention of publicists, civic groups and governmental agencies to the devising of schemes for the furtherance of marketing improvement. Congress took early action when it authorized the Department of Agriculture to launch a marketing program; many cities and citizens' organizations made local investigations and presented schemes to help in the reduction of food costs and to improve local marketing conditions. It was natural that the improvement and the extension of the public market should play a prominent part in all these proposals. The Department of Agriculture through its new Bureau of Markets adopted what turned out to be the most realistic approach, for it viewed the city market as merely one important link in a long chain of marketing operations. With a view toward reducing costs and eliminating waste it therefore planned its program to begin with the preparation for market of the farm products and studied all elements of the different channels through which these commodities passed to the consumers. At the end of some of these channels was the city market. Accordingly methods, layouts, expenses and the business of city markets were inquired into; changes were proposed where individual requests for aid were made; and an adjustable model ordinance for the establishment and regulation of markets was prepared. Moreover the department aided in the 1918 census of the country's municipal markets. As a result of these

activities of the Bureau of Markets a series of services including standardization, grading, market news and inspection was developed gradually, which succeeded in turning light on previously obscure marketing procedures and transactions and helped to effect salutary changes. In recent times as a result of these improvements in the mechanics of distribution truck and dairy farmers have become less dependent upon local outlets, while the consumer is assured of an adequate and reliable food supply.

The city markets nevertheless have been among the chief sufferers from this reform in marketing technique. Despite the value of the public retail market for food distribution its relative importance in the United States has been declining. The development of stores in residential districts with delivery and other services struck a serious blow at many of these institutions. Particularly the chain store organizations with their machinery for obtaining and handling perishables and with the aid of economical group advertising have succeeded in effecting a revolution in the retail distribution of foodstuffs. Moreover well nigh insuperable difficulties have appeared to hinder the operation of farmers' stalls, which had earlier been the mainstay of the municipal markets. Farmers conducting such stalls have found themselves at a disadvantage in selling to dealers because of their lack of organization. The rapidly increasing value of land in urban communities has hindered the expansion of municipal residential marketing projects. Growing street congestion is another factor which prevents the local farmer from personally exploiting the nearby market. The almost universal use of the automobile in America has encouraged the development of roadside stalls where the housewife may make her purchases either during the family excursions into the country or perhaps more frequently. Finally, the irregular and seasonal nature of local food receipts, the changing dietary habits and greater emphasis on the consumption of fresh foods have compelled produce merchants and commission men to forge links with the whole world in an effort to provide a steady food supply. More and more therefore those who studied the economic and social aspects of the relationship between agriculture and the city populations saw the market place as but one element in a complicated pattern. In addition the appearance of agricultural surpluses rather than deficits in the western world in the post-war period and, in the United States at any rate,

the declining significance of the food expenditure in the average family budget as a result of increases in real wages caused reformers and civic bodies to be less insistent concerning the spread of municipal markets, particularly of the residential, retail and farmer types.

In Europe, where conditions and habits have changed less quickly and loyalties to established institutions are strong, the public markets still handle more nearly the same proportion of the local food supply and remain the center of considerable government and municipal attention. Also many large European markets now receive foods from all parts of the world and are developing transportation and other services to meet expanding conditions. The Halles Centrales of Paris is an example of this type of European municipal market. The market proper covers ten acres in the heart of the city some two or three miles from the connections over which most of its products arrive. Pavilions divided into sections are devoted to the marketing of fruits and vegetables, meats, fish, poultry, dairy products and flowers. Each section is subdivided into wholesale and retail parts, although the wholesale merchant will sell any of his commodities in units of one package. The municipality keeps close check on each merchant's turnover, and space is granted to another or locations are changed as volumes of business change. Each merchant who occupies municipal space is required to be a French citizen of good repute, to deposit a guaranty fund with the municipality and to file a duplicate copy of all account sales. Rent is based on volume of goods sold. No merchant is allowed to conduct both a buying and a selling business; he must sell solely on commission and he may not make financial or other advances to growers in soliciting consignments. Most of the produce comes in shipments direct from growers, usually a few packages of one fruit and a few of another. As there is no standardization of packages, the commission merchant must account for many kinds of packages when dealing in one commodity. Refrigerator space is owned by the market and rented to the lessees.

According to a report from the United States consulate in Paris the fees derived by the municipality in 1931 from the wholesale section of this market approximated \$537,000; rental of parking space brought about \$72,000; refrigerating space brought approximately \$10,190; and a total of about \$43,000 was derived from other sources within the market. Fees amounting to

about \$157,000 were collected by the city from the retail markets in the Halles. The expenses of the city in connection with the running of the Halles in 1931 were estimated to be about \$400,000 exclusive of repairs, depreciation and insurance on the buildings. The Paris police department administers the market and the records are open to the public. A grower or shipper may search the police records for any given day and compare the accounts of his sales with those filed as well as with those for the rest of the market. If discrepancies or infractions of the regulations are found, the commission merchant may have his guaranty funds confiscated and in addition lose his space.

Spaces for retailing are reserved in some of the pavilions, but retail trade is declining in the Halles. The farmers' market elsewhere in Paris, connected with a wholesale trade in meats, fish and dairy products, is one of the busiest markets in the world. A large wholesale business has developed on private property adjacent to the Halles, where requirements are not so exacting. The commission firms which do the largest business are here in their own buildings. They buy, sell and make advances to growers at will. One of these firms has three large wholesale stores in different parts of the market and employs a sales force of about fifty men and women. Each salesperson is allotted floor space to sell one or more growers' consignments, receives a commission of $1\frac{1}{2}$ percent of his sales and retains his own goodwill with a certain clientele. In effect therefore these salespersons constitute a group of small commission merchants under the auspices of one firm. The firm provides the premises, the accounting and the finances and maintains a field organization to obtain consignments.

The degree and character of the management of the municipal markets of the United States vary widely. The typical large municipal market is likely to have an equipped building and a manager, usually called the market master, who rents the stalls, refrigerator space and other facilities at prices which supposedly cover actual operating expenses. The manager also as a rule employs a small clerical and mechanical staff and a number of inspectors and is responsible for the enforcement of the market regulations, the collection of rentals and the maintenance of the plant. It is his function to cooperate with the local health authorities on questions of sanitation and with the city agency in charge of weights and measures. Sometimes municipal

markets provide checking facilities and less often parking space and opportunities for group advertising. Delivery service is seldom furnished and price control is rarely attempted, although the typical market expects to guarantee reasonable satisfaction to customers. Figures for a few municipal markets may be illuminating. That in Rochester, New York, which cost approximately \$233,000, has had in recent years an average annual operation revenue of \$46,494 against an average annual operating expense of \$14,264. The market in Syracuse, New York, which cost \$380,000, has had an average annual operating revenue of \$34,404 against an average annual operating expense of \$14,250. Market revenue more than covers the operation and maintenance of the three municipal farmers' markets in Detroit, including also expenses of the administrative bureau, but the market system is not self-sustaining if the interest on investment in land and buildings and depreciation are taken into consideration. It should be noted also that charges for light, water and police protection are not included in the maintenance budget. In this city no effort has been made to raise stall rentals high enough to cover these charges, as the municipal council considers the public markets of real social value to the city and the surrounding producers.

A notable development of fairly recent years has been the wholesale terminal produce market. With its elaborate network of railroad team tracks, shedded platforms for display, sale and truck delivery, cold storage facilities and auction rooms the terminal market seems destined to occupy a large and secure place in the distribution process. The functions it performs are many: it is in a position to facilitate the efficient reception of the necessary huge volume of perishable food supplies of the modern city; it makes feasible the early release of refrigerator and other cars and the prompt distribution of receipts to wholesalers, large retail dealers and storage houses; it is able to encourage direct carload shipments from growers and shippers; it helps to reduce the appalling crosshauls, re-handlings, wastes and delays which have become such an outstanding characteristic of intra-urban transportation.

These terminal markets vary in character. Most of them are privately owned, as, for example, those in Detroit, Boston, Philadelphia, Cleveland and Buffalo; the Bronx Terminal Market in New York City is, however, a municipal enterprise. Many of the privately owned

terminal markets are the property of railways. Some terminal markets are of the platform type, notably those in Boston, Philadelphia and Detroit, where the contents of cars are unloaded and displayed on the platforms in much the same manner as at auctions; others are divided into series of individual stores, as in Chicago and Cleveland. All these terminal enterprises are large properties and some conduct a very sizable business. In Boston, for instance, the terminal market handles 25,000 carloads of food-stuffs annually; in Philadelphia one plant covering nearly forty acres and representing an investment of \$12,000,000 handles about 32,000 carloads each year, while another covering twenty-three acres and representing an investment of \$7,500,000 receives some 16,000 carloads. It is interesting that despite their recent origin these two Philadelphia markets already distribute approximately 95 percent of the food-stuffs entering the city by rail. On the other hand, New York City's municipally owned terminal market in the Bronx despite a very elaborate plant, which cost the city almost \$20,000,000, has not yet taken any significant place in the distribution of the city's food supplies.

Detroit possesses a union terminal market to which all cars carrying perishables on any railroad can be switched. An operating company composed of car lot receivers leases the terminal from the railroad financing company which built it, and rebates revenues over expenses annually to all receivers operating in the terminal. The company charges the car lot receivers a flat rate per car for unloading and for displaying on the package platforms and for placing cars and showing samples at the highly perishable as well as bulk yard delivery platforms. Fruit auction facilities are also provided. Sales are made chiefly to wholesalers, but anyone who buys the stipulated minimum quantity is free to purchase. The Detroit Union Produce Terminal, as it is called, now represents an investment of between \$5,000,000 and \$6,000,000 and handles about 30,000 cars a year.

CAROLINE B. SHERMAN

See: FOOD INDUSTRIES, section on FOOD DISTRIBUTION; FOOD SUPPLY; MARKET; MARKETING; AGRICULTURAL MARKETING; GOVERNMENT OWNERSHIP; TERMINALS; FAIRS.

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MARKOVIĆ, SVETOZAR (1846-75), Serbian journalist, labor leader and politician. After completing his course in a technical school in Belgrade Marković continued his studies in St. Petersburg. Here he became familiar with the Russian socialist and revolutionary currents and was especially influenced by the writings of Chernyshevsky. He then continued his technical education in Zurich, where he moved in the circles of the revolutionary émigrés and became familiar with the works of Marx and Lassalle. Upon his return to Serbia he devoted himself to the popularization of socialist doctrines in his own country. Since Serbia was chiefly an agrarian country, Marković believed the ideas of Chernyshevsky were more applicable than those of Marxian socialism. He compared the Serbian *zadruga* to the Russian *mir* and held that the conversion of the whole land into one *zadruga* would bring about a communist society without the intermediate stages of capitalist economy and violent class war. Marković elaborated these views in his *Načela narodne ekonomije* (Principles of national economy, Novisad 1875) and in "Socijalizam ili društveno pitanje" (Socialism and the social question, in *Rad*, vol. i, 1874). He also published several radical opposition newspapers, for which he suffered persecution and imprisonment. The bureaucratic system he bitterly denounced as an expensive and oppressive administration, excluding the people from public affairs and impoverishing it; he attacked the liberal party for compromising on the 1869 constitution and on the sovereign's dominance over

the Assembly, for being concerned solely with political matters and for remaining a party of the intelligentsia. He criticized the romanticism, nationalism and absence of social program of the United Serbian Youth and was an advocate of municipal and district autonomy, sovereignty of the National Assembly and municipal ownership and cultivation of land; he also hoped for the eventual creation of a federated Balkan state. Some of these ideas, like municipal landownership, proved utopian, while others found adherents in all classes. Marković organized several labor unions and working men's associations as well as consumers' and producers' cooperatives and laid the foundation of the first popular party in Serbia. Under his influence greater attention was paid to economic questions, realism came to dominate in literature, interest in natural science grew and the intelligentsia came into closer contact and cooperation with the masses. Although he died at the age of twenty-nine he exerted a more powerful influence on the social and political currents in Serbia than any other individual before or after him.

DRAGOLJUB JOVANOVIĆ

Works: *Celokupna dela Svetozar Marković* (Collected works), 8 vols. (Belgrade 1888-93).

Consult: Jovanović, S., *Svetozar Marković* (2nd ed. Belgrade 1920); Skerlić, J., *Svetozar Marković* (2nd ed. Belgrade 1922); Wendel, H., *Aus dem südslawischen Risorgimento* (Gotha 1921) p. 135-65, and *Aus der Welt der Südslawen* (Berlin 1926) p. 205-10.

MARLO, KARL (Karl Georg Winkelblech) (1810-65), German economist. Marlo was professor of technological chemistry in Cassel. Impressed by the problem of poverty in the course of a journey through Norway in 1843, he decided to study economics and the social question. Between 1848 and 1859 he published as a series of pamphlets three volumes on economics. A fourth appeared posthumously after A. E. F. Schäffle had in 1870 first drawn attention to Marlo's works in his *Kapitalismus und Socialismus* (2nd ed. Tübingen 1878).

Marlo belonged to the school of juridical as distinguished from scientific socialism, finding in the principle of right the propelling force of production and the means of securing universal welfare. He saw the elimination of poverty as a problem not of distribution but of production, to the solution of which the existing order (monopolism) in which right is founded on might is an obstacle. Accepting the French revolutionary principle of the rights of man (including the right to labor and its fruits), which he

regarded as a Christian doctrine, he criticized as abstract the ideals of freedom and equality. The former, he argued, leads through economic liberalism to plutocratic tyranny and oppression of the workers; the latter through the leveling regime of communism to privileges for the lazy and consequent social poverty.

An organic system (federalism) is needed to secure to the weak the right to exist and to the able the right to work. To this end society must own the means of production and industrial production must therefore be a corporate enterprise. Choice of occupations as well as the use of the fruits of labor and the means of enjoyment must be based on individual preferences and abilities. Thus harmony will be established between justice and production. More concerned than Malthus with the problem of population, Marlo advocated not only moral but legislative restraints. Characteristically he advocated that every married couple be obliged to acquire shares in the productive associations.

Marlo provided German artisans and journeymen, who were pressed on the one hand by landowners and on the other by rising capitalists, with a rationale of their needs. At their congresses in Hamburg in June, 1848, and in Frankfurt in July and August, 1848, he rendered practical aid and formulated a program which attacked economic liberalism and called for a reformed guild system. It demanded the establishment of a federation of guilds, guild councils and an economically constituted parliament, wider suffrage, compulsory primary and free vocational schools, a twelve-hour day, a minimum wage, sick benefits, a graduated income tax, a tariff on manufactured goods, land reform and land settlement aid.

RODOLFO MONDOLFO

Works: *Untersuchungen über die Organisation der Arbeit, oder System der Weltökonomie*, 3 vols. (Cassel 1848-59; 2nd ed., 4 vols., Tübingen 1884-86); *Über Maasssysteme und Geld* (Cassel 1855); *Aus Karl Georg Winkelblechs literarischem Nachlass*, ed. by W. E. Biermann (Leipzig 1911).

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MARQUARDT, KARL JOACHIM (1812-82), German historian. Marquardt studied theology, archaeology and classical philology under

Schleiermacher, Böckh and Gottfried Hermann at the universities of Leipsic and Berlin and taught in *Gymnasien* in Berlin, Danzig, Posen and Gotha. It was particularly through the influence of Böckh that he early devoted himself to research in the history of antiquity. In his more mature period he was influenced by the historical and epigraphic methods of Theodor Mommsen.

Marquardt represented the type of the industrious student and great teacher of the middle of the nineteenth century. Wise in his limitations and one of the greatest scholars of his age, he became one of the leading historians of Roman political and private life, its administrative organization and economic system. Marquardt's first work, *Cyzicus und sein Gebiet* (Berlin 1836), presented a composite picture of Cyzicene territory, history, cults, festivals and literary figures, based on a study of all the available inscriptions, coins and written records. He published several other studies on sources of Roman history and various aspects of Roman social life, but his most important work was in connection with the completion of the *Handbuch der römischen Altertümer* (7 vols., Leipsic 1871-82; 2nd ed. 1876-86), which had been started by W. A. Becker in 1843. In this work Marquardt collaborated with Mommsen and later with several younger scholars. While Becker's original purpose had been to give unity and coherence to the widely ramified material of Roman antiquities, Marquardt's aim was more ambitious. He separated the study of the state from that of private life and divided the material regarding the former into three parts. The first part, prepared by Mommsen, deals with the organs of government and the state power. The second, dealing with the administrative organization of the Roman Empire, was prepared by Marquardt himself; in this study, which remains indispensable, his extraordinary knowledge of facts, his critical mind and his ability to deal with difficult data are revealed at their best. The third part, dealing with the separate branches of administration, finance, army and religion, was later reworked by Dessau, Domaszewski and Wissowa. In two other sections of the *Handbuch* Marquardt treated Roman private life, consideration of which he regarded as indispensable, since even the most trivial manifestations of everyday life often reveal the deep rooted causes of events.

WILHELM WEBER

Consult: Ehwald, Rudolf, *Gedächtnisrede auf Joachim Marquardt* (Gotha 1883).

MARRIAGE. Human mating differs from the sex indulgence of other species in that it is morally appraised according to norms distinctive of each society. Marriage denotes those unequivocally sanctioned unions which persist beyond sensual satisfaction and thus come to underlie family life. It is therefore not coextensive with sex life, which embraces matings of inferior status in the social scheme of values. A realistic analysis does not confound theory and actuality in sex behavior, nor does it derive conjugal life from the sexual drive, which can often be amply gratified outside of wedlock. To merge the two concepts is to forego insight into the distinctively human element of the phenomena.

Society everywhere limits the choice of partners biologically possible. The rule prescribing marriage within one's own group is called endogamy; insistence on marriage outside of one's group, exogamy. Endogamy flourishes in stratified societies and is illustrated in the royal marriages of modern Europe and in the prevalent inbreeding of its aristocracies. The equivalent condition occurs in class conscious savage communities. Among the Masai of east Africa blacksmiths are pariahs; hence no Masai of good standing marries into a blacksmith's family. In Ruanda in the Belgian Congo herders, peasants and hunters represent racially, economically and socially distinct castes and intermarriage is therefore disapproved. As in Europe the restriction of choice to one's peers produces unions of kindred in the upper ranks. In Hawaii, Peru and ancient Egypt a ruler, being the scion of divine lineage, could properly mate only with his own sister; these instances, however, represent a flouting of an almost universal law against marriage between siblings or between parent and child.

Beyond the narrow incest group there are wide differences as to forbidden degrees. Tribes organized into clans commonly tabu marriage not only among all relatives on that parental side which determines clan affiliation but also with fellow members not related by blood. Similarly, the suspicion that residents of the same village might conceivably be related leads in northern California to local exogamy irrespective of genealogically ascertained kinship. Transgressions of such rules resting on legal fiction may be punished as capital crimes, as in Australia, or merely ridiculed and vituperated, as among the Crow Indians. On the other hand, even close relatives so far as they fall outside the immediate incest

group and the clan frequently figure as preferential mates.

Cousin marriage is especially widespread but usually follows a definite pattern. Union with the child of a father's brother or of a mother's sister, that is, with the parallel cousin, is extremely rare, the former being best authenticated for the Arabs. But marriage between cross cousins—with the child of a father's sister or of a mother's brother—occurs in parts of Australia, Africa, Melanesia, Asia and America. This arrangement may be symmetrical, without discrimination as to which of the two types of cross cousin is married, or asymmetrical, if the mother's brother's child is preferred to the exclusion of the father's sister's child, and vice versa. Some Australian tribes bar all first cousins but prescribe marriage between certain types of second cousins. Tribesmen in Australia are ranged in kinship categories, unions being fixed between pairs of these classes, individual members of which are coupled by elders.

Sometimes there is a sentiment against marriage outside of one's age group, but matrimonial claims on women of a lower or higher generation are common. A Tlingit of British Columbia may properly choose his brother's daughter; a Navaho of Arizona or a Rukuyenn of French Guiana who weds a widow may also marry her daughter by a previous husband. The principles of substitution for a deceased spouse serve in part to illustrate the point. The most widespread of these laws operate within the generation: a brother inherits the widow (the levirate) and a sister succeeds to the dead wife's status (the sororate). But in Africa a son sometimes falls heir to his father's wives with the sole exception of his mother—a custom paralleled among the Caribs in South America; and in matrilineal communities the uterine nephew sometimes assumes his deceased maternal uncle's marital position, as in Melanesia and among the Haida of British Columbia. By an easy extension of the levirate-sororate principle a man lays claim to the wife's brother's daughter or his wife's father's sister, as among the Omaha. In polygynous societies simultaneous marriage with a woman and such kinswomen of hers are orthodox. A significant arrangement occurred among the now extinct Tupis of the Brazilian coast; a man had a preemptive claim to his sister's daughter, and by surrendering this girl her father was partly absolved from the services a husband must render his wife's kin. Instances of this category are so numerous that cousin

marriages have been plausibly regarded as secondary consequences of a primary coupling of avuncular with nepotic kindred, as in British Columbia and Melanesia and among the Miwok of California.

Exogamy and endogamy may coexist with reference to different units. The Todas of India are divided into endogamous halves, each of which comprises a number of exogamous clans. The Australians were long credited with exogamous clans and moieties, but Radcliffe-Brown has shown that the aborigines of most tribes are primarily concerned with the positive prescription of certain preferential unions rather than with the outlawry of intraclan marriage. The exogamous clan rule would thus figure as an incidental rather than as a primary consideration. For reasons of expediency most marriages occur within the political or local unit. But unless there is a positive tendency so to restrict them the term endogamy is pointless.

Rules like the foregoing are not the dictates of caprice. Marriage until the most recent period has never been primarily directed toward the sentimental gratification of the spouses, a notion that is even now limited to a small section of the population of several occidental countries. The human norm is more nearly represented by two wealthy European peasants on friendly terms with each other and desiring to consolidate their estates. The dowries and settlements that figure in the realistic fiction of eighteenth and nineteenth century literature reflect a similar psychology, and the arrangement of royal marriages even in contemporary times is in complete conformity with this point of view. As Tylor indicated, savage matrimony is preponderantly a means for cementing group alliances between families or clans according to the social organization. Hence arises the principle of sibling equivalence which finds expression in the sororate and the levirate; the bond once created is not allowed to snap but an attempt is made to perpetuate it by appropriate substitutions. Hence also the resentment found among the Navaho when a widower fails to take his second mate from among his wife's kin, and the strengthening of the alliance by the permission of polygynous marriage with two or more sisters or clanswomen. Infant betrothal results from the same motive.

If these quasi-political considerations are supplemented with others of a strictly economic nature as well as a desire for offspring, most matrimonial arrangements are accounted for. In

simpler conditions a wife is normally not a liability but an asset. In some circumstances, as in the arctic, she becomes a necessity, since no adult male can persistently depend upon his kinswoman for the performance of certain indispensable tasks. There is everywhere a sexual division of labor by which the conventional standards of living are guaranteed to each family. In Queensland the husband provides fish and large game, while the wife supplies shellfish, seeds and wild fruits. In this cooperative labor on behalf of the common household Radcliffe-Brown sees the function of matrimony throughout Australia: "... this aspect of marriage, *i.e.*, its relation to subsistence, is of greatly more importance than the fact that man and wife are sexual partners . . . sexual relations between a man and a woman do not constitute marriage in Australia any more than they do in our own society." Similarly, in New Guinea a Kai need not marry for sexual pleasure, which he can easily secure without assuming responsibilities; but he must marry in order to have somebody who will make his pots and nets, weed his plantations and cook his meals, in return for which he builds the hut and provides game and fish. Where women are no longer economically productive, a dowry may take the place of the bride price in order to make household management possible. This institution flourished in ancient Attica as in modern France and is *per se* no more degrading to womanhood than are bride purchase and polygyny.

Since a girl in ruder societies represents economic value, her family surrenders her only for an equivalent. By a simple arrangement two families with a son and a daughter in each can exchange the girls, as in west Australia and New Guinea. A different line of development leads to bride service, which figures prominently in the Old Testament. A suitor is often chosen for his skill as a provider and at least temporarily performs the functions of a hired man, as among the Hidatsa of North Dakota. Such duties terminate among some peoples, as among the Makusi of Guiana, with the birth of a child. Lifelong service is attested for the Tupis of Brazil; here the husband fought for his brothers-in-law, carried their provisions on a journey, supplied their larder, built their dwellings and felled trees to make a clearing. But characteristically these tasks were lightened if he gave his daughter to one of her maternal uncles who asserted a preemptive claim to her person. A relationship of this order involves matrilocal

residence at least in the sense that the husband must live in the village if not in the house of the wife's kin. But Tupi society permitted significant modifications of this pattern. A young man of wealthy family might satisfy all claims by supererogatory gifts and thereby effect an independent establishment which was patrilocal. A wife captured in warfare necessarily followed her husband to his home.

More typically, patrilocal residence results from bride purchase. A northwest Californian took his wife to his own village if he had fully indemnified her family; otherwise he was condemned to matrilocal residence with concomitant loss of prestige. The term bride purchase must be used with caution. In many North American tribes the contracting families exchange gifts of nearly equal value, which merely solemnize the procedure and constitute a mutual expression of good will. Such balancing of dowry and bride price cannot be treated as purchase at all. Even where there is no return gift, however, purchase may imply acquisition of widely varying rights. A Kai of New Guinea becomes master of his wife's sex life, is entitled to punish her for adultery and claims restoration of the price in case of elopement. But he does not secure either control of her property or of her children, who belong to her kin. In direct contrast stands the principle widely found in Africa by which a man purchases offspring in addition to his wife's economic services. He claims as his legal progeny not only children begotten by himself but the issue of avowedly adulterous cohabitation, and in case of barrenness he is entitled to restitution of his payments. The logical rigor of African thought in the matter is well exemplified by the Lango of the Upper Nile. Here full fledged matrimonial status is not recognized before the birth of a child. Until then the woman is designated as a bride, not as a wife, and is obliged to live with the groom in the bachelors' hut, returning to her mother for the period of confinement. Only after the birth of a child is an essential part of the compensation rendered to the mother-in-law—that part designed as a starting point for the payment which the bride's younger brother will have to make for his bride. Should the woman desert her husband, he has redress by claiming either the original bride price or the bride's brother's children; in the absence of issue he is theoretically empowered to appropriate the brother's wife. Even outright purchase need not degrade a woman to the condition of a chattel that can be

sold at will to the next bidder; and instead of being derogatory to her position purchase may be positively honorific. Thus among the Crows of Montana for a woman to be bought is *prima facie* evidence of the good character she bears for virtue and skill.

Whether a woman is or is not capable of owning property depends on other considerations than the mere fact of her having been bought. Effective use and the creator's title to the product of his labor are principles sufficiently strong in primitive life to preclude the operation of finespun legalistic casuistry. Although a west African woman is her husband's property, the cotton she raises is hers and need not be supplied to her husband without compensation; a North or South American Indian will not dispose of his wife's basketry or pottery without her consent. Feminine disabilities may be better interpreted from another angle. The reason for the fact that women may not own livestock among pastoral nomads may lie in the early dissociation of women from domestication of the larger species of animals. Crystallized into a fixed tradition this negative correlation would bar women from occupation with livestock and hence would militate against their owning and inheriting stock. Such relative novices in herding as the Chukchi permit a woman to take a man's place with the herds and quite logically also admit her to relevant property rights.

As between husband and wife the distribution of property rights is relatively simple in the ruder societies; such simplicity is characteristic also of rules of inheritance. The same division of labor which establishes distinctive rights for each partner largely determines the allotment of goods on a spouse's demise. A man will inherit a father's, a maternal uncle's or a brother's possessions; a woman, her mother's, her aunt's or a sister's. A wife rarely inherits a husband's property, nor does he inherit the wife's property, for according to a widespread primitive belief spouses form a temporary alliance with a pooling of interests; death dissolves the partnership, and the property held by either reverts to his or her kindred.

The natural sex ratio never departs considerably from a one to one relationship—for example, the disparity observed in Prussia in the period beginning in 1875 merely vacillates between 100 to 105.9 and 100 to 108.6 in favor of boys—hence on an equitable allotment of mates monogamy would seem to follow. Among some peoples, however, cultural factors intervene in

favor of plural marriage. Among warlike tribes the male population is artificially reduced, and among people like the Eskimo the strenuous hunting life tends to have the same effect. On the other hand, female infanticide, prompted sometimes by the rigors of existence, sometimes by obscure motives, effects the reverse result. Old men or chiefs may arrogate to themselves an unfair proportion of the women, and where wives are bought the well to do are similarly favored. The ancient Egyptians permitted bigamy at all periods and in all ranks of society, but only kings and grandees kept harems. In Uganda, where men were liable to death not only in warfare but also in wholesale sacrificial offerings, the women far outnumbered the men, yet peasants were for the most part monogamous and seldom had more than three wives.

Monogamy thus prevails mainly in simpler societies which are democratically organized and free from conditions which alter the natural sex ratio; under more complex conditions it is the lot of the lower classes. In southeast Africa the number of wives becomes an index of social position. Because of their economic labors a husband with ten mates controls more millet than his neighbors and therefore can make more lavish display of hospitality. A man does not require more and more wives in order to have a sufficiency of food or primarily to transmute their produce into tangible goods; his aim is to secure added prestige. The inevitable result of African bride purchase and exaggerated polygyny on the part of influential elders is the condemnation to celibacy of the poorer males, who must wait until the levirate or filial or nepotic widow inheritance provides a wife. Actually they often engage in intrigues with the married women.

Polygyny is scarcely anywhere due to masculine concupiscence. On this point evidence from several areas is mutually corroborative. The prominent men among the Tupis kept several wives for domestic and horticultural labor as well as for prestige. The first wife often tried by every means to pass on some of her chores to additional wives, whose position in relation to her was that of maidservants. A similar situation is found among the Kai in New Guinea and the east African Kikuyu. Polygyny may be stimulated also by the first wife's sterility and by mandatory inheritance of an elder kinsman's widow. In the latter case the woman may be too old for physical cohabitation, so that she devotes herself wholly to the usual feminine tasks; if

incapacitated she becomes a liability. Altogether there is nothing derogatory to womanhood or intrinsically difficult in savage polygyny. Jealousy occurs on the whole but rarely, and it arises rather because of slights to offspring than from sexual passion. In the Lobi region of west Africa the judicial records of fifteen years show barely a half a dozen cases of violence among co-wives.

One determinant of polygyny is the prolonged period of lactation characteristic of many peoples, which may extend to the child's third and even fourth year. This is sometimes coupled with a strict tabu against cohabitation prior to weaning, as among the Lango, a restriction which without polygyny would prove intolerable. Matrilocal residence when established as a permanent condition militates against polygyny except of the sororal variety. The Hopi, for example, are monogamous; among them desire for change of partners has not led to simultaneous marriage with a woman and her sister, regarded as orthodox elsewhere but which their ideology forbids, although rational grounds for the prohibition are not evident. Instead monogamy is unstable, the husband readily divorcing himself and taking up his abode with another family.

Polyandry is best known from the Todas, among whom female infanticide underlies the institution. If the several husbands are brothers, all without discrimination are held fathers of all the children. Unrelated fellow husbands take turns in the exercise of marital rights, and one of them establishes fatherhood by a rite. Unless this is duplicated by one of his associates, the performer remains legal father of all the wife's issue; so that a man dead for years may figure as the legal parent of a newborn infant, who later falls heir to a share in his estate.

Several husbands sharing several wives on equal terms without differential ties uniting any one couple would constitute group marriage. Such sexual communism does not exist in reality. The best authenticated instances are from the Chukchi of Siberia and the Australians about Lake Eyre. Among the latter, however, no woman is ever the affianced wife of more than one man; and the husband enjoys an unchallenged preemptive right over her. Accordingly group marriage here simply denotes the right of concubinage conferred by a council of elders on individuals belonging to the categories from which husbands are properly chosen and the custom does not abrogate the individual bond between duly betrothed spouses. Similarly,

Chukchi marriage is individual, being only sporadically tempered by an ephemeral exchange of sexual prerogatives with fellow contractors, the motive being to obtain bed mates during sojourns in a strange camp.

Still less can prenuptial license be confounded with group marriage. As practised in the Trobriands of New Guinea and among the east African Masai it is regularly followed by the establishment of individual marriage ties. Promiscuity in the sense of an indulgence unchecked by any inhibitions is not practised even by the young people of these tribes, since incestuous copulation is barred. A Masai bachelor is not permitted to have sexual relations with a kinswoman living in the same district and he may not have intercourse with his affianced bride before marriage.

Premarital indulgence must not be considered a universal feature of the savage state. In many cases virtue is exacted of girls at least in the upper rank, as in the case of princesses in British Columbia or Samoa. But even where great freedom is allowed before marriage, the double standard usually supervenes in wedlock. In Christian societies compulsory monogamy has not been construed as exclusive cohabitation for the male partner. The code of the *Siete partidas* of thirteenth century Spain expressly legalizes concubinage, and to the austere Protestant ethics of Samuel Johnson a husband's affairs were merely lapses from saintliness in the sight of God; socially they were petty derelictions which a sensible wife would ignore. This one-sided latitudinarianism obtained until the recent rise of feminism, although here and there both sexes took advantage of the laxity condoned by usage, as in the polite circles of eighteenth century Europe.

In savage tribes adultery may be punished by a severe drubbing. In Bantu Africa proprietary rights had to be satisfied by indemnification, while a correspondingly offended wife had no redress against either her spouse or his mistresses. Yet the husband who resents spontaneous intrigues on his wife's part may voluntarily offer her to a guest in token of hospitality, and wife exchange is a common Eskimo practise. Specific circumstances also bring about transfer of sexual privileges. Thus the purchase of membership rights in certain Plains Indian organizations involved the ceremonial surrender of a wife to the seller; and in some circumstances a Crow husband had to submit to the abduction of his wife by a former lover. Among the Masai

a man abandoned his wife and hut to a visiting fellow member of his age grade.

General looseness need not preclude a lofty ideal of feminine chastity, such as is found, for example, among the Yukaghirs of Siberia and the Crows. Some of the honorific ceremonial performances of the latter might devolve only on an absolutely blameless married woman. Quite generally marriage illustrates a constant clash of ideals and practise. Patriarchal peoples like the Chinese and Australians are not lacking in cuckolds and henpecked husbands; and while a Crow gentleman is in honor bound to show no concern over the kidnaping of his wife, many are unable to live up to this standard of serenity.

Primitive weddings are largely secular, although occasionally a magico-religious element enters the formal conclusion of the bond. For example, among the Reindeer Chukchi a reindeer is slaughtered and both bride and groom are smeared with its blood; the young woman daubs the sledges with blood, feeds the sacred objects of the household with reindeer marrow and sprinkles the fireplace with the sacrificial blood. In more sophisticated societies religious features may assume prominence. Thus prior to a west Tibetan wedding several of the groom's friends ride to the bride's house but are not admitted to the family estate until they have established their affiliation with the proper religious fraternity; they must submit to being catechized as to the pre-Buddhistic faith of the country and are scourged for any mistakes. The father of the Athenian bride sacrificed a lamb, of whose flesh all present partook; they likewise shared a flat cake mixed with honey. In ancient Rome too the oldest type of patrician marriage bore a sacramental character; the sacred *far* cake was partaken of by bride and groom in the presence of the supreme ecclesiastical functionaries of the state. German peasants preserve a similar custom, a couple eating from one bowl and drinking from one glass. Purely secular weddings can assume a solemn character. The exchange of gifts by the contracting families is often conducted with great ceremony, and symbolic performances may be essential. Sometimes a spectacular capture of the bride, who pretends coyness and is aided by her friends or kindred, holds the center of the stage. Such features were formerly interpreted as survivals of a hypothetical condition in which wives were always captured by force. But such seizure is everywhere of subsidiary importance, since the overwhelming majority of primitive marriages either

occur within the same local group or are regulated by formal contract between the members of two groups. Accordingly the theory has yielded to less far fetched views. The sham resistance and fighting may merely symbolize the act of appropriation, as Hobhouse suggested, or the psychic inhibitions real and feigned which accompany the abrupt transition to a novel status, as E. C. Parsons and Thurnwald contend. In consonance with this view cases of coyness among prospective grooms have been demonstrated from Greece, Albania, the Caucasus, India, Assam and Melanesia.

Among primitive peoples marriage, being as a rule considered a civil contract, can be readily dissolved. Where a wife has been bought the husband is legally at an advantage; on the other hand, under pronounced matrilineal conditions, as among the Hopi of Arizona, the woman is favored and may simply divorce her husband by setting his belongings outside her mother's house. But such correlations, significant as they are, must not be allowed to obscure the basic realities. The presence of children in all societies acts as a deterrent irrespective of legal prerogatives; and self-interest operates in the same direction. Islam may permit a Siberian Turk to dismiss his wife at will; but since he has painfully accumulated the many head of cattle exacted by her family as the bride price he will not lightly exercise his theoretical privilege. Similarly, a Crow may publicly proclaim his divorce as a gesture of bravado, but he is not likely to cast off a virtuous, hard working mate for whom he has paid several horses. In New Guinea even a wife's elopement does not precipitate a desire to send her packing: having purchased her services the husband claims either her person or the price paid for her, and her kin recognize the obligation to indemnify him. In ancient Athens a husband was allowed to divorce his wife but he hesitated in view of the obligation to return the dowry with heavy interest. A common cause for divorce everywhere is sterility; but where polygyny is practicable, a second wife may be taken instead.

Although the sentimental aspects of marriage have been grossly exaggerated, it would be erroneous to deny them. Prolonged companionship and participation in parental duties may engender genuine affection among savages far transcending a merely erotic interest. In special cases this rises to a truly romantic attachment, incontrovertibly attested by mythological variants of the Orpheus theme among the Menom-

inee and Blackfeet. It is of course, as among civilized peoples, the exceptional experience of poetically gifted individuals. As barrenness exposed a wife to contempt and divorce, being at times, as among the Lango, more severely regarded than the most extravagant debauchery, so fecundity generally enhanced her status in the family not only in primitive societies but also in ancient Palestine and Egypt, where even a maidservant gained prestige by bearing children for the master.

Economic factors determine the character of marriage, but they are never the sole determinants of social phenomena. Throughout equatorial South America and the adjoining Brazilian littoral there prevails the identical aboriginal system of horticulture supplemented by the chase and fishing. As Kirchhoff has shown, whatever trivial variations occur in the intensiveness of these coexisting activities they cannot account for the observed social differences. Specifically, woman's contribution to economic values nowhere suffices to place her on a higher plane; and contrariwise, as in polite European society, parasitism is not degrading and fails to bar her from domestic and public influence. According to Schmidt and Thurnwald woman became dominant through the invention and practise of horticulture, but matriarchal tendencies were subsequently overthrown. Schmidt holds that the motive for this revolution was partly man's resentment of his abject condition—a hypothesis which departs from economic principles of explanation. Thurnwald more consistently invokes the effects of pastoral nomadism; men as stock breeders were able to buy wives and thus created patriarchal institutions, although these need not have been so degrading in reality as the juridical consequences would logically suggest. This does not, however, explain how patriarchal tendencies could arise in the New World, where pastoral nomadism was non-existent. Apart from this the theory in either form fails to account for vital facts. Hopi women, who add little to the larder, own the houses. Tonga women neither till the fields nor even cook, but they enjoy a comparatively high place in society. In Melanesia women, who often do the major part of the farming, are rigidly excluded from ceremonial and public life. Some herders admit women to the cattle enclosures, while others disqualify them from milking and tending stock. Even such related Turkish nomads as the Altaians and the Kirghiz differ in the sexual allotment of duties. The Altaian

woman's legal status is not a jot better and her actual lot is much harder despite the fact that she assumes virtually all economic tasks except the milking of mares and the chopping of firewood. Such evidence leads to the conclusion that the position of women is invariably codetermined by ideological considerations, which may largely override those of an economic order.

Marriage and its correlate, the family, are throughout their history shot through with prudential motives that overlap and at times apparently swamp all others. But in reality these motives never eliminate ideological postulates that are overlooked precisely because they are too fundamental to require explicit formulation, while the economic provisions incidental to matrimony must be overtly stated. Closer scrutiny invariably discloses ethical and sentimental norms.

Thus, biologically, girls can marry at puberty; primitive peoples proceed on the fact as an axiom and practise adolescence rituals largely as an advertisement of nubility. By contrast, in the United States in 1930 only 1.3 percent of the girls were married at fifteen and at twenty-one 54.8 percent still remained single. The economic factor does not determine the difference, for as elsewhere the adolescents might be married to men from twenty to thirty years older, who would be engaged in gainful occupations. Even if such disparity were regarded as repugnant, the parents might shoulder the economic responsibility, as they did formerly. Postponement is not motivated by the desire to insure a livelihood but to insure it in arbitrarily assumed conditions of an ideological order, such as independence of parental aid and psychological companionship of mates. The spread of contraceptive knowledge has, however, tended to stimulate earlier marriage.

In a survey of the modern developments and contemporary trends of matrimonial institutions the theories of the intellectual class that writes history must be distinguished from the practises of the masses of men who make it; and one must guard against devoting disproportionate attention to the usages of polite society. Until the industrial revolution the overwhelming majority of Europeans were illiterate peasants only remotely affected by the sophistications of the genteel. Their mores had been shaped in pagan days and, sincere votaries as they doubtless were of Christianity, the new dispensation modified their culture pattern only slightly; it was not a basically creative force.

Disregarding local variations, the conditions preserved until quite recently in rural Poland may be considered typical of Europe and they present in all essentials the picture outlined for the primitive peasantry of other continents. All normal individuals are expected to marry; the marriage arrangements are dictated by the interests of the group precisely as in aboriginal Australia or America. Every family seeks the most advantageous alliance; every wedded individual gains new status, outwardly symbolized by the prerogative of being addressed in the plural. The free play of sexual attraction in the choice of a mate is narrowly circumscribed by the principle of social acceptability. A precipitate falling in love leading directly to engagement is psychologically almost impossible, for a dominant endogamous principle demands the rough equivalence of the groom's and the bride's economic and social position. But no more than elsewhere can the attitude of the human actors be reduced merely to an economic background. A dowry is essential not because the groom requires a contribution for effective husbandry, but because both families are intent on maintaining their social level. The groom must supply acreage not because living would otherwise be impossible for the young couple, but because matrilocal residence in Poland as in aboriginal northwestern California involves loss of dignity. On economical grounds the only son of a wealthy farmer might well wed without thought of dowry, but his family demand it as a symbol of their own importance and solidarity. Contrariwise, an heiress would humble herself by marrying a poor youth: it suggests lack of proper suitors, hence some personal deficiency.

As Thomas and Znaniecki have shown, such ideology breaks down with the disintegration of the social unit in which it had its origin. The Polish seasonal emigrant to Prussia when isolated from his group loses awe of its tabus; the immigrant in America separated from the members of his family is no longer subject to their control. Untrammelled by the old group standards an individual can find sex expression outside of marriage and married persons can obtain release with impunity, which was impossible in the old country.

The emergence of individualism observable among Polish immigrants is characteristic of every country affected by the industrial revolution. Urbanization generally involves the severance of the individual from the group into which he was born and his removal from its surveil-

lance with a concomitant weakening of its standards. This is facilitated by his encountering new ideologies, such as the positivism of natural science and the doctrines of militant socialism, influences which lay the axe to the root of such concepts as the divine institution of marriage, the sacramental character of the wedding ceremony, the mystical, hence indissoluble, bond of husband and wife and the justification of sex relations only in terms of progeny. When these revolutionary ideas gain a following among a large body of city dwellers, their ramifications may come to affect the residual peasantry as well.

The factors underlying contemporary developments are singularly intricate; it is consequently easier to gain an insight into the configuration of the family of primitive tribes or of classical antiquity than to gain a true picture of the family life in any modern civilized country. The pertinent fact seems established, however, that the birth rate has declined appreciably since 1880 and that this decline may plausibly be linked with the spread of neo-Malthusian doctrines. These are deprecated most vigorously by the Roman Catholic church; the deterrent effect of the teachings of the church against contraceptive measures is revealed by Beveridge's comparative statistics, which show that in the Catholic countries of Ireland, Italy and Austria the number of legitimate births in 1911 was 98.8, 91.1 and 89 percent respectively of what it was in 1881, while for the Protestant countries Prussia, England and Wales and Saxony the equivalent percentages were 74.7, 68.4, 57.3. That these disparities cannot be attributed to the relatively larger rural population in the Catholic countries is shown by the fact that in 1928 the birth rate per 1000 of the population in Protestant capitals (Berlin, 10.2; Stockholm, 10.9; London, 16.2) is also lower than that of the Catholic capitals (Madrid, 25.9; Rome, 25.9). The Catholic birth rate is, however, no longer everywhere unequivocally higher than that of other denominations. Apart from religious factors determining the birth rate the contraceptive knowledge readily accessible to the professional and affluent strata has resulted in their becoming less fecund than less favored elements of the population. But this "differential fertility" is probably transient rather than permanent. The latest data for Stockholm, where the disparity was marked in 1911, show poorer and wealthier districts reproducing at the same low rate in 1927; a zero correlation in legitimate births is reported for 1929 between fertility and social

status from Berlin, the capital with the lowest birth rate. As Hogben has declared: "Such data are suggestive of a general decline of the population of Europe in the near future. They do not support the view that differential fertility is more than a passing phase in the history of western civilisation."

On the other hand, Japanese practise is still shaped by the traditional policy, which persists in the face of progressive industrialization. This survival of an anti-individualistic psychology should not, however, be set against modern European usage as though the latter represented repudiation of parenthood, for limitation of offspring is often dictated by the desire to secure greater advantages for such children as are produced. Moreover the ethically gratifying picture often drawn of the large and happy family unit before its disintegration by the machine age is largely mythical. Benjamin Franklin's sober report of his childhood demonstrates, for example, the difficulties of attaining a close emotional bond between the members of a large family and reveals the veritable hatred that is bred by the proximity of psychological aliens related by blood.

Notwithstanding religious and social radicalism marriage in the United States increased by 5.25 percent in 1930 over 1890 (60.55 against 55.3 percent of the population fifteen years and over). In Germany the same age grades in 1885 showed 54 percent of the men and 50.1 percent of the women married, against 55.5 and 53.1 in 1910. A comparison of the decade 1891 to 1900 with the year 1925 shows that the marriage rate has held its own in Italy, has gained slightly in Holland, Denmark and Sweden and considerably in France, has receded in England, Austria, Switzerland and Norway. The fact that knowledge of contraception fails to prevent marriage must be attributed to the prestige value still assigned to social sanctions of the traditional type.

It may be safely predicted then that the future of marriage will be shaped not merely by utilitarianism but largely on the basis of regnant ideologies. A long distance survey of civilization proves that any normative trend, however dominant for a time, may be wholly superseded by another trend. A reversal of present attitudes as to marriage is wholly conceivable; whether or not it shall occur depends on the potency of appeals involving the older ideologies.

ROBERT H. LOWIE

See: SOCIAL ORGANIZATION; FAMILY; KINSHIP; INTER-

MARRIAGE; FAMILY LAW; SEX ETHICS; COMMON LAW MARRIAGE; COMPANIONATE MARRIAGE; CONCUBINAGE; FREE LOVE; WOMAN, POSITION IN SOCIETY; DOWRY; MARITAL PROPERTY; BIRTH CONTROL; INFANTICIDE; POPULATION; DIVORCE; DOMESTIC RELATIONS COURTS; ALIMONY; COURTSHIP; ABDUCTION; CHASTITY; CELIBACY; BREACH OF MARRIAGE PROMISE; INCEST; ILLEGITIMACY; CULTURE; ANTHROPOLOGY.

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MARSCHALL VON BIEBERSTEIN, BARON ADOLF (1842–1912), German statesman and diplomatist. Educated at Heidelberg in the law, Marschall entered the administrative service of his native province of Baden, served as a member of the Baden upper chamber from 1875 to 1883 and became Baden's representative in the Bundesrat at Berlin in 1883. In 1890 he entered the German Foreign Office, succeeding Herbert Bismarck as secretary of state for foreign affairs during the chancellorships of Caprivi and Hohenlohe. Here he distinguished himself by his juristic knowledge as well as by his strong advocacy of a navy and a vigorous foreign policy. His extraordinarily successful ambassadorship to Turkey from 1897 to 1912 coincided with the new interest taken by Germany and especially by the young emperor, William II, in the Near East and in the development of German economic and political influence at Constantinople and throughout the sultan's wide dominions. Soon after his arrival on the Bosphorus Marschall won the esteem of all European residents at the Turkish capital by securing the banishment of one of the sultan's relatives, who had been levying blackmail freely upon foreigners. He accompanied Emperor William II on his spectacular trip to the Holy Land and used his influence to secure favorable concessions from the sultan for the building of the Bagdad Railway, the later construction of which he did much to further. He stood in close and friendly relations with Abdul-Hamid and consequently enjoyed a larger influence at Constantinople than the rest of the diplomatic corps. On account of his experience and ability Marschall was selected as Germany's chief delegate to the Second Hague Peace Conference in 1907, and in 1912 shortly before his death he was withdrawn from Constantinople to be sent as ambassador to England.

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MARSHALL, ALFRED (1842–1924), English economist. Marshall, born in Clapham, was designed for the ministry by his father, a cashier in the Bank of England and a strict evangelical. But

the boy developed a passion for mathematics and with resolution beyond his years declined a scholarship at Oxford, borrowed money from an uncle, won an "exhibition" in St. John's College, Cambridge, and justified his course by becoming second wrangler in 1865.

Elected to a fellowship in his college, Marshall expected to work on molecular physics. His outlook was changed "by the sudden rise of a deep interest in the philosophical foundation of knowledge, especially in relation to theology." The controversy between J. S. Mill and Dean Mansel concerning the intellectual basis of Christianity was then agitating the English universities. Mansel's defense of orthodoxy, said Marshall, "showed me how much there was to be defended." Membership in a discussion club which included Henry Sidgwick, W. K. Clifford and F. D. Maurice fed this new interest. Without a grievous struggle Marshall became an agnostic. The *Origin of Species* and Herbert Spencer's *First Principles* gave him a new faith—evolutionary progress. Yet like Spencer and his Cambridge circle he continued to think of human behavior as did the utilitarians. Desire to read Kant ("the only man I ever worshipped") in the original led to Germany and contacts with German economists. Questioning "the justification of the existing condition of society" he turned to Mill's *Political Economy* and "got much excited about it." He supplemented his reading by visiting city slums, "looking at the faces of the poorest people." Presently he resolved to make as thorough a study as he could of economics. Appointment to a special lectureship in moral science at St. John's College in 1868 enabled him to follow this new plan.

Thus Marshall came to economics through ethics, bringing with him a curious assortment of qualities—the zeal of an evangelical moralist, faith in evolutionary progress, the ethical criteria and the psychological outlook of a latter day utilitarian, the gifts and the technique of a mathematician. At first the dazzling possibilities of applying mathematics to economics dominated his work. He "translated as many as possible of Ricardo's reasonings into mathematics, and endeavored to make them more general." In so doing Marshall developed the diagrammatic method and hit upon marginal analysis before Jevons' *Theory of Political Economy* appeared in 1871. By 1873 he had nearly completed his papers on *The Pure Theory of Foreign Trade* and *The Pure Theory of Domestic Values* (privately printed, 1879; reprinted, London School of Eco-

nomics and Political Science, Scarce Tracts, no. 1, London 1930). In 1875 he visited the United States, traveling extensively and making a special study of protectionism in a new country. In collaboration with Mary Paley, a lecturer at Newnham College, whom he married in 1877, he made the realistic studies embodied in *Economics of Industry* (London 1879, 2nd ed. 1881). Even in these early years Marshall was striving to combine abstract analysis with close observation of contemporary life and with researches in historical development.

Marriage involved the loss of his fellowship. To get a living Marshall went to Bristol as principal of University College. But administration and money raising were uncongenial and overstrained his health. He resigned his principalship in 1881, spent a year recuperating in Italy, returned to Bristol as a professor in 1882, passed on to Balliol College, Oxford, in 1883 as a fellow and lecturer and on Fawcett's death went back to Cambridge in 1885 as professor of political economy. This post he held until his retirement in 1908; he continued to live at Cambridge until his death.

Marshall's position as the foremost British economist of the time was established in 1890 by the publication of his *Principles of Economics* (8th ed. London 1920). The book is built around a discussion of the "general relations of demand, supply and value." This ground plan enabled Marshall to treat utility analysis and cost analysis as coordinate instead of rival factors in determining values and to treat the problems of distribution as a series of special cases under his general value theory. He applied his scheme alike to an individual's adjustments of sacrifices and satisfactions and to the adaptations of a vast population in producing, distributing and consuming their national dividend; to problems involving varying degrees of competition and monopoly; to temporary market equilibria; to periods permitting an increase of supply through fresh production; and to periods long enough for changes to occur in the supply of the factors of production. A comparison of the framework of Marshall's *Principles* with that of Mill's *Principles* shows a great advance in the integration of economic theory. Detailed knowledge of earlier work is required to find the points at which Marshall unobtrusively fitted into the new pattern his own discoveries.

The symmetry of this pattern did not betray Marshall into thinking that his results were definitive. Economic theory, he held, "is not a

body of concrete truths but an engine for the discovery of concrete truths." While he believed that "qualitative analysis has done the greater part of its work," he recognized that the "higher and more difficult task" of "quantitative analysis" has scarcely been begun. Yet beginnings there are in his own work; he was an eager consumer of statistics, and statistical concepts play a larger role in his reasoning than the text declares.

Marshall was profoundly concerned with the problems of human "progress"—so much so that his readers may not realize "the essentially static character of his equilibrium theory," which he "was a little disposed sometimes to camouflage . . . with many wise and penetrating *obiter dicta* on dynamical problems" (Keynes, J. M., *Treatise on Money*, 2 vols., New York 1930, vol. ii, p. 406-07). These *obiter dicta* flow from the notion of an evolving human nature, as the static equilibrium theory flows from utilitarian conceptions. To Marshall economic conduct is controlled by motives which can be classified as satisfactions and sacrifices if not as pleasures and pains, and the force of motives can be measured in money. But to him man is also a creature of habits which show cumulative changes. Thus his technical analysis smacks of Bentham; his hope for the future of Darwin. Perhaps he thought that Spencer had really reconciled the two conceptions of behavior.

Throughout his life Marshall was hesitant about committing his theories to print. The doctrines in the *Principles* had been familiar to his students for many years before the book appeared. He was working out his monetary views as early as 1875, but his first serious contributions to the literature of the subject were answers to a questionnaire issued by the Royal Commission on the Depression of Trade and Industry in 1886. Not a little of Marshall's best work first appeared in a similar form. From 1891 to 1894 he was a member of the Royal Commission on Labour and he played a large part in the drafting of the final report, especially the sections dealing with trade unions, the minimum wage and irregularity of employment. His evidence before other commissions and the memoranda he prepared for governmental use have been published under the title *Official Papers by Alfred Marshall* (ed. by J. M. Keynes, London 1926).

The first five editions of the *Principles* were marked Volume I. Volume II never appeared. Marshall explained in the sixth edition: "I had

laid my plan on too large a scale." In place of a continuation he produced *Industry and Trade* in 1919 (4th ed. London 1923) and *Money, Credit and Commerce* in 1923. The first book is primarily historical and descriptive, dealing with the evolution of modern industrial and business organization. The second, finished in Marshall's eightieth year, is "mainly pieced together from earlier fragments, some of them written fifty years before." He was struggling to put together one more volume, to be called *Progress: Its Economic Conditions*, when overtaken by his last illness.

Marshall was not only the most influential economic theorist of his day but also a great teacher. He trained generations of ardent students, who in turn have trained a large proportion of the active economists in the British Empire and elsewhere. To many of his contemporaries it seemed that Marshall had solved the most fundamental problem of economic theory by demonstrating the mutual relations of cost, utility and value; that he had secured economics against psychological and ethical criticism by basing his analysis upon money measures of the force of motives, which remain valid on any interpretation of the motives themselves; and that his "engine for discovery" can be applied to whatever new problems economics may encounter in the future.

WESLEY C. MITCHELL

Consult: Memorials of Alfred Marshall, ed. by A. C. Pigou (London 1925), containing in addition to reprints of some of Marshall's articles and letters a bibliography of his writings and biographical essays; Keynes, J. M., "Alfred Marshall 1842-1924" in *Economic Journal*, vol. xxxiv (1924) 311-72; Taussig, F. W., "Alfred Marshall" in *Quarterly Journal of Economics*, vol. xxxix (1924-25) 1-14; Parsons, Talcott, "Wants and Activities in Marshall," and "Economics and Sociology: Marshall in Relation to the Thought of His Time" in *Quarterly Journal of Economics*, vol. xlv (1931-32) 101-40 and 316-47.

MARSHALL, JOHN (1755-1835), American jurist. John Marshall's father, Thomas Marshall, was his principal tutor and destined him from infancy for the bar. He was strongly influenced in his youth by the rising debate over American rights, in which Thomas Marshall as a follower of Patrick Henry and a friend of Washington had a part. Between 1776 and 1779 John served in the revolutionary army, emerging from it a convinced nationalist. In 1780 he attended a course of lectures on law by Chancellor Wythe at William and Mary College, practically his only formal instruction of any sort, and in the same

year was admitted to the bar of Fauquier county. Two years later, having been elected a member of the general assembly of Virginia, he moved to Richmond.

His rise to political prominence and his success at the bar were rapid. In 1788 he was a member of the Virginia ratifying convention. In 1797 he became one of the famous X. Y. Z. commission to France and in 1799 was elected to the House of Representatives, where he made a notable constitutional argument in the so-called Jonathan Robbins' Case, in which Adams' opponents accused him of invading the sphere of the judiciary by handing over to British authorities an Englishman who had committed murder on a British vessel. Marshall convinced the House that the action of the president was in conformity with the Jay treaty and within his official prerogative in the diplomatic field. In 1800 Marshall became secretary of state in Adams' cabinet and in the following year Adams without consulting him nominated him, in succession to Ellsworth, chief justice of the Supreme Court, a position which he held until his death.

Marshall's principal achievements as chief justice were in the field of constitutional interpretation. They include the successful assertion for the Supreme Court of its role as final authorized interpreter of the constitution, both as against Congress and as against the states, and the establishment of the rule of liberal interpretation of the powers of the national government which rendered the judicial review of acts of Congress a negligible factor of the constitutional system until the Dred Scott decision. He also extended the obligation of the contracts clause to public grants, including charters of corporations, and laid the argumentative foundation for the doctrine that Congress' power over commerce is exclusive, by which the commerce clause has become today one of the two most pervasive restrictions upon state power. Underlying these achievements were certain values: Marshall believed in national unity for its own sake and also because he conceived the country at large to be the proper theater of individual enterprise and, by the same token, of national enrichment and cultivation. Conversely, the objects of suspicion and attack of the court under his guidance were the state democracies, the curbing of which had been a principal purpose of the convention of 1787.

Aside from *Marbury v. Madison*, Marshall's great formative opinions lie between the years 1819 and 1827 (see especially Wheaton's *Reports*,

vols. ii, iv, vi, ix, and xii), and their common provocation was the rise of the doctrines of states' rights and popular sovereignty. His tenacity and success in waging an uphill fight against the forces ranged behind these ideas, with the support of colleagues from the ranks of political foes, are among the most remarkable personal achievements in American history. It is essential to recognize, however, that his syllogistic method was characteristic of his period; nor were his contemporaries disposed to question that to the judicial rendering of law a peculiar validity adhered. Moreover Marshall was singularly successful in prevising the future. The values safeguarded by his version of the constitution remain for the most part those which are safeguarded by constitutional law today. The fundamental balance in the constitutional system, that between democracy and property, is in important measure his contribution.

He also contributed to international law. During his term he delivered eighty opinions involving this field of jurisprudence. An outstanding feature of these is his insistence that such matters as the recognition of national independence or the interpretation of treaties are political and not judicial questions and that decisions in such cases when made by the political arm of the government must be followed by the courts.

EDWARD S. CORWIN

Works: *Constitutional Decisions of John Marshall*, ed. with an introductory essay by J. P. Cotton, 2 vols. (New York 1905).

Consult: Beveridge, A. J., *The Life of John Marshall*, 4 vols. (Boston 1916-19); Corwin, E. S., *John Marshall and the Constitution*, *Chronicles of America* series, vol. xvi (New Haven 1919); *John Marshall, Life, Character and Judicial Services*, compiled and ed. by J. F. Dillon, 3 vols. (centenary ed. Chicago 1903); Veillier, Juliette, *Le grand-juge Marshall et le droit des gens* (Paris 1923).

MARSHALL, LOUIS (1856-1929), American constitutional lawyer and Jewish communal leader. Marshall was born in Syracuse of a German Jewish family. He studied law at Columbia University and soon achieved great repute as a constitutional lawyer. As a member of a New York law firm which represented big business corporations and the "vested interests" in general Marshall was a conscientious upholder of the old rugged individualism against all the new demands of modern society. He argued against home rule legislation for New York City, against the child labor amendment and other progressive legislative acts. On the other hand, he strenuously opposed the Lusk laws in New York

and the attempt to oust the Socialist assemblymen from the New York state legislature in 1920. He acted as mediator in the cloak makers' strike of 1910 and prepared the protocol of settlement. He was also an ardent defender of the civil rights of the Negro. He was in high standing in the Republican party and was a member of the constitutional conventions of New York in 1890, 1894 and 1915. In the words of his biographer, eulogizer and aide-de-camp in the field of Jewish affairs, Cyrus Adler, he was "an American, Republican, law-abiding lawyer, a citizen of the Old School."

Marshall's main interest, however, was the Jewish question in all its ramifications. As one of the founders of the American Jewish Committee in 1900 and as its president from 1912 until his death he practically dominated Jewish public life in the United States for over twenty-five years. One of his most important achievements in this connection was in securing the termination of the treaty of 1832 with Russia because of that country's discriminatory policy toward visiting American Jews. Marshall's conception of the Jewish problem was reduced to the pure and simple politico-legalistic question of civil and religious liberty and equality of every citizen before the law as guaranteed by the constitution. The American Jewish Committee was conceived as an organization of rich and influential "representative Jews" and had little in common with the aspirations of the great masses of the eastern European Jews and with the great problems which agitated them, especially the Zionist movement. As a staunch adherent of the old time liberal conservatism Marshall led a bitter fight against any kind of national movement among the Jews and for a time was in a strategic position to impose his will—his "Marshall law," as Zangwill said—upon world Jewry.

The World War and the subsequent evolution of world politics together with the greater self-assertion of the eastern European Jews brought about a change in Marshall's attitude. He became president of the American Jewish Relief Committee immediately after the outbreak of the war and was active in the subsequent Joint Distribution Committee. Although he opposed from the start the movement for the American Jewish Congress and the demands for national minority rights for the Jews, he finally agreed to cooperate and went to the Paris Peace Conference as head of the American Jewish delegation and played a leading role in securing the adoption of the minorities provisions. Marshall's last im-

portant achievement was his part in the creation of the Jewish Agency for Palestine. After extensive negotiations, in which he persisted in toning down the nationalist implications of the Palestinian problem, he made a pact in 1929 with Dr. Chaim Weizmann for the cooperation of Zionists and non-Zionists in the practical task of upbuilding Palestine. The first sessions of the Jewish Agency in Zurich in August, 1929, at which Marshall was chairman, were the culmination of his career. He became for a short time the outstanding leader in world Jewry. Several days afterwards, however, he died, and with his death his work began to disintegrate.

A. CORALNIK

Consult: Adler, Cyrus, Lehman, Irving, and Stern, Horace, *Louis Marshall* (New York 1931); Wise, James Waterman (Analyticus), *Jews Are Like That* (New York 1928) p. 177-205.

MARSHALL, WILLIAM (1745-1818), English agriculturist. He was the son of a Yorkshire farmer and became a trader and planter in the West Indies until 1774, when he retired to a farm near Croydon, Surrey. In 1778 he published a book on his farming experiences, *Minutes of Agriculture* (London). For the purpose of increasing general knowledge of progressive farming he made and published between 1787 and 1798, after one or two years' residence in each area, a survey of English agriculture. By the latter date his reputation was second only to that of Arthur Young. He set himself against the "false spirit of farming," that overoptimism which was a legacy of seventeenth century writers. He warned against "elevated hopes of pecuniary gain" and wrote, "If you meet with an implement, process or plan of management which pleases you, do not hurry to the field of practice . . . consult deliberately your soil, situation and servants." This sane and cautious approach considerably raised the prestige of agricultural literature.

Marshall advocated leases and the farm of medium size. Although less bigoted than most, he was nevertheless a strong supporter of enclosures and considered the General Enclosure Act of 1801 as the most laudable measure adopted by the board. His claim to have originated the idea of the Board of Agriculture, founded in 1793, is untenable. At first an active member, his failure to secure the secretaryship and a feeling that his ideas were being adopted without due acknowledgment led him into active opposition. This attitude was intensified by the

board's proposal for an Agricultural College, which he had suggested, but not originally, in his *Minutes*. This hostility cost him the support of many influential agriculturists. He now concentrated on his own surveys and compiled a critical commentary of the board's activities. Of his projected general treatise on English rural economy he completed only the section dealing with estate management.

Although more exclusively agricultural and perhaps more sound than those of Young, Marshall's writings were less popular and influential. Nevertheless, the striking advance made by agriculture during his lifetime owed much to his efforts.

G. D. AMERY

Works: *The Rural Economy of Norfolk, Yorkshire, Gloucestershire, the Midland Counties, the West of England and the Southern Counties*, 12 vols. (London 1787-98, 2nd ed. 1795-1805); *Reviews of the Reports to the Board of Agriculture* (York 1808-17); *On the Landed Property of England* (London 1804); *On the Appropriation and Enclosure of Commonable and Inter-mixed Lands* (London 1801).

Consult: Ernle, Lord (Prothero, R. E.), *English Farming Past and Present* (4th ed. London 1927).

MARSILIUS OF PADUA (c. 1275-c. 1343), Italian political theorist. Exactly what share in the authorship of the *Defensor pacis* should be attributed to the Frenchman John of Jandun is uncertain but it cannot have been important. It speaks for Marsilius as the essential if not the sole author that the thought of the *Defensor* issues unmistakably out of the experience of the north Italian communes, of which Padua was one. Not only had these communes won self-government but they had like the rest of the world been thrown into confusion by the claims of the papacy to ultimate sovereignty over all states. These claims had reached their dramatic climax in the bull *Unam sanctam* (issued by Boniface VIII in 1302). The defeat of Boniface by Philip IV of France and the removal of the popes to Avignon did not diminish the papal pretensions, and the struggle broke out afresh in 1322 when Pope John XXII refused to recognize Louis of Bavaria as emperor elect. At this Marsilius resolved to hesitate no longer in voicing his accumulated anticlerical indignation.

The *Defensor pacis* is a reasoned if virulent attack not only on the papal supremacy but also on the whole ecclesiastical jurisdiction which had been gradually built up by means of canon law. To justify his hostility to the church the author begins his treatise by setting forth his

theory of the state, in which although he borrows freely from Aristotle he reflects substantially the actual developments in the Italian communes. This closeness to reality gives the measure of the Paduan's advance over his metaphysically oriented predecessors, such as Aquinas and Dante. He declares in favor of the sovereignty of the people, who are the ultimate "legislator"; the executive (*pars principans*) he conceives of as the agent of the legislator and thinks that its functions will be most successfully performed when entrusted to a constitutionally limited monarch. In such a state, in the origin of which God, contrary to all mediaeval theory, has no share, the role of the priesthood should be subordinate. But what are the facts? By a monstrous usurpation the priesthood has projected itself into the affairs of every Christian commonwealth and produced an intolerable confusion. The state, organized to secure internal peace, is balked of its prime purpose, which, as the title indicates, the aroused author rises to defend.

Having cleared the ground with his purely secular theory of the state Marsilius next analyzes and disproves the false claims put forth by church and pope. While this section often sinks to the level of a ferocious anticlerical diatribe, it is notably original in attempting to rest its case not on the purely logical arguments characteristic of the schoolmen but on an examination of the relevant historical data. By going back to the Scriptures the author recovered the evangelical norm, in the light of which the immunities and wealth of the clergy as well as the absolutism of the pope appear as monstrous perversions of the original spirit of Christianity. Secularism and historical criticism are the two strong timbers which the *Defensor pacis* contributes to the intellectual foundations of the modern world.

FERDINAND SCHEVILL

Works: *Defensor pacis* (Basel 1522; ed. by C. W. Previté-Orton, Cambridge, Eng. 1928), tr. by William Marshall (London 1553); his *Tractatus de translatione imperii* and the *Tractatus de iurisdictione imperatoris in causis matrimonialibus* can be found in Goldast, Melchior, *Monarchia S. Romani Imperii*, 3 vols. (Hanover and Frankfurt 1611-14) vol. ii, p. 147-53 and p. 1383-91; *Defensor minor*, ed. by C. K. Brampton (Birmingham 1922).

Consult: Battaglia, Felice, *Marsilio da Padova e la filosofia politica del medio evo*, Studi filosofici, n.s., vol. iv (Florence 1928); Riezler, Sigmund von, *Die literarischen Widersacher der Päpste zur Zeit Ludwig des Baiers* (Leipzig 1874); Stieglitz, Leopold, *Die Staatstheorie des Marsilius von Padua*, Beiträge zur Kulturgeschichte des Mittelalters und der Renaissance, vol. xix (Leipzig 1914); Emerton, Ephraim,

The Defensor Pacis of Marsiglio of Padua, Harvard Theological Studies, vol. viii (Cambridge, Mass. 1920); Allen, J. W., "Marsilio of Padua and Mediaeval Secularism" in *The Social and Political Ideas of Some Great Mediaeval Thinkers*, ed. by F. J. C. Hearnshaw (London 1923) ch. vii; Sullivan, James, "The Manuscripts and Date of Marsiglio of Padua's 'Defensor Pacis,'" Brampton, C. K., "Marsiglio of Padua," and Previté-Orton, C. W., "Marsiglio of Padua" in *English Historical Review*, vol. xx (1905) 293-307, vol. xxxvii (1922) 501-15, and vol. xxxviii (1923) 1-18.

MARTELLO, TULLIO (1841-1918), Italian economist. Martello was professor of political economy at the University of Bologna from 1883 to 1917. A disciple of Francesco Ferrara, from whom he adopted not only the fundamental principles but also the incisive style and the controversial tenor characteristic of his writings, Martello surpassed the master in the thoroughness of his economic liberalism. He opposed all forms of collective interventionism in the sphere of economic activity, even rejecting progressive taxation as an instrument of "artificial" redistribution of wealth. Martello's works, which seem inspired more by the desire of combating economic heresy than by that of opening new avenues of economic thought, are not likely to survive the test of time. His best work is perhaps *La moneta e gli errori che corrono intorno ad essa* (Florence 1883), in which he effectively combated some current fallacies in monetary theory, especially those concerning the nature and function of money and the difference between discount and interest and their respective variations. An opponent alike of the monometallic and bimetallic theories as well as of the state theory of money, Martello advocated with Ferrara absolute freedom of coinage and limitation of the function of the state to mere control of the monetary standard. This idea is debatable, as are his views, already condemned by experience, on monetary crises, which he held are always supposed to be the consequence of economic crises and never the cause; on the variations of the value of money, which he deemed of no importance as they tend to affect uniformly all phases of economic life; and on the futility of every attempt to stabilize the value of money, a corollary of the preceding assertion. Martello refined Ferrara's theory of cost of reproduction and formulated the theory of cost of substitution, which more adequately describes the general principles underlying the process of exchange.

CARLO PAGNI

Important works: *Storia della Internazionale dalla sua*

origine al congresso dell'Aja (Padua 1873); *Stato attuale del credito in Italia e notizie sulle istituzioni di credito straniere* (Padua 1874); *La questione dei banchi in Italia* (Florence 1877); *L'economia politica antimalthusiana e il socialismo* (Venice 1894); *L'imposta progressiva in teoria e in pratica* (Venice 1895, 2nd ed. Turin 1895); *L'economia politica e la odierna crisi del darwinismo* (Bari 1912); *In difesa del giuoco d'azzardo legalmente disciplinato* (Padua 1914).

Consult: Amoroso, Luigi, and others, *In onore di Tullio Martello* (Bari 1917); Bertolini, A., in *Giornale degli economisti*, vol. lvi (1918) 150-52; Piante, Giovanni de, "L'opera scientifica di Tullio Martello" in *Economia*, vol. xi (1927) 7-23.

MARTENS, FEDOR FEDOROVICH (1845-1909), Russian international lawyer and diplomatist. Martens was professor of international law at the University of St. Petersburg from 1871 to 1905. A member of the Council at the Russian Ministry for Foreign Affairs, he was present as Russian delegate at many international conferences, such as the 1874 conference for codification of the laws of war, the anti-slavery conference of 1889-90 and the two Hague peace conferences of 1899 and 1907.

Martens' doctrine of international law is a positivist one: it is based upon an idea of "international community" founded upon necessities of life under a common standard of civilization. Development of international rules is consequently dependent on the measure of common consent on the part of the civilized states. State practise and not doctrinal expansion is the main source of international law. Martens was in advance of his time in stressing the importance of the process of "international administration," devoting a great part of his treatise on international law to interstate activity for the protection of social and economic interests.

While maintaining in theory a cautious attitude toward international law and its progress Martens contributed much in practise toward its growth and its rule. At international conferences he supported the codification of international law, thereby assisting to elucidate questionable points and incidentally to fill up existing gaps. As one of the best known international arbitrators of his time he was frequently appealed to by litigant states, rendering many a famous award and contributing largely to the development of international jurisdiction and of international judge made law.

B. AKZIN

Important works: *O konsulakh i konsul'skoi urisdiktsii na Vostoke* (St. Petersburg 1873), tr. into German by H. Skerst as *Das Consularwesen und die Consular-*

jurisdiction im Orient (Berlin 1874); *Sovremennoe mezhdunarodnoe pravo tsivilizovannikh narodov*, 2 vols. (St. Petersburg 1882-83, 5th ed. 1904-05), tr. into French by Alfred Léo as *Traité de droit international*, 3 vols. (Paris 1883-87), and into German by Carl Bergbohm as *Völkerrecht, das internationale Recht der civilisirten Staaten*, 2 vols. (Berlin 1883-86); *Recueil des traités et conventions conclus par la Russie avec les puissances étrangères*, ed. by F. Martens, 15 vols. (St. Petersburg 1874-1909).

Consult: Rivier, A., "Literarhistorische Uebersicht der Systeme und Theorien des Völkerrechts seit Grotius" in *Handbuch des Völkerrechts*, ed. by F. von Holtzendorff, vol. i (Berlin 1885) p. 521-23; Lammasch, Heinrich, "Friedrich von Martens und der Berliner Vertrag" in *Zeitschrift für das Privat- und öffentliche Recht der Gegenwart*, vol. xi (1884) 405-22; Kamarowsky, C. L., in *Institut de Droit International, Annuaire*, vol. xxiii (1910) 538-43.

MARTENS, GEORG FRIEDRICH VON (1756-1821), German jurist. Martens was born in Hamburg. In 1784 he became professor of law at Göttingen, from 1808 to 1813 he was state councilor in the kingdom of Westphalia, from 1814 privy councilor in the kingdom of Hanover and from 1816 deputy from this state to the German *Bundestag* at Frankfort on the Main. His reputation rests upon his works on international law. Of these the most important is his *Primae lineae juris gentium europaeum practici* (Göttingen 1785; tr. by W. Cobbett, Philadelphia 1795), which he later enlarged into his *Précis du droit des gens modernes de l'Europe* (Göttingen 1789; finally reedited by Charles Vergé, 2 vols., Paris 1864) and published also in a German version, *Einleitung in das positive europäische Völkerrecht* (Göttingen 1796). Martens preferred French because it was the international language of diplomacy, and he made use of it for his great collection of treaties, which since its publication has generally been known as the *Recueil Martens* (first series, 7 vols., Göttingen 1791-1801; last series still being published, vols. i-xxiii, Leipsic 1909-31).

Martens was one of the cofounders of positivism in international law, which began with Bynkershoek and was also especially advanced by Johann Jakob Moser. He was the first to banish the law of nature from international law except as a standard of value for the critique, upon grounds of political expediency, of the positive international law actually recognized by the practise of states. He especially rejects as utopian a general and cosmopolitan law applicable to the whole of humanity. States must be released from their natural condition of insecurity and fear by converting the international

law, founded on the law of nature, with its recognition of fundamental rights of states, into a general positive international law, the distinctive mark of which would be the possibility of securing its observance by force—if necessary by war. Martens presumes or feigns that the European system of positive international law would coincide with the universal international law founded on the law of nature. It is thus only necessary to engage upon a natural law critique of the particular systems of international law which either by treaty or custom are valid between individual states of the family of nations. The strongly positivistic science of international law of the present day, going far beyond Martens' position, no longer admits the law of nature as a standard system with a claim to legal validity but recognizes only a legal philosophical standard of value and a scientific politics of international law directed rather to practical details.

ROLF KNUBBEN

Consult: Wheaton, H., *History of the Law of Nations in Europe and America* (New York 1845) p. 325–28; Rivier, A., in *Handbuch des Völkerrechts*, ed. by F. von Holtzendorf, vol. i (1885) 465–68; Bailby, Henri, in *Les fondateurs du droit international* (Paris 1904) p. 603–76; Hubrich, Eduard, "Georg Friedrich von Martens und die moderne Völkerrechtswissenschaft" in *Zeitschrift für Politik*, vol. vii (1914) 362–89; Figge, Robert, *Georg Friedrich von Martens, sein Leben und seine Werke* (Gleiwitz 1914); Martitz, F. von, "Der Recueil Martens" in *Archiv des öffentlichen Rechts*, vol. xi (1921) 22–72; Knubben, R., "Völkerrechts-positivismus und Völkernaturrecht" in *Wörterbuch des Völkerrechts und der Diplomatie*, ed. by Julius Hatschek and Karl Strupp, 3 vols. (Berlin 1924–29) vol. iii, p. 287–88, and "Die Subjekte des Völkerrechts" in *Handbuch des Völkerrechts*, vol. ii, pt. i (Stuttgart 1928) p. 77–79.

MARTIAL LAW is a legal concept by which Anglo-American civil courts have sought in times of disorder to define the limits of executive or military control over citizens in domestic territory. It is analyzed in so many different ways, and there are so many theories as to its sanction, that no definition can do more than express the most current legal impressions. Martial law is regarded as the substitution of the will of the executive or military commander for the process of the courts. Its justification is necessity, and its existence is a "question of fact." The most usual test of that "fact" is to determine whether or not the courts are open; but the limits, if any, to executive action under martial law, and the respective powers of the legislative, executive or judicial branch of the government in determining the question of fact

involved, are subject to too many contradictory qualifications to permit brief statement. Any situation to which martial law might theoretically be applicable may also be discussed in interchangeable terms to which different sets of doctrine apply.

Let it be assumed that a body of citizens unlawfully assembles and threatens disorder in domestic territory. Legally the situation presents several possibilities. It may be called a riot, in which case any proper officer can order the assembly to disperse—a procedure commonly known as reading the Riot Act because of the provisions of the English Riot Act of 1715, which made felons of any participants who did not disperse within one hour after such order. The officer may call on any citizen to aid him; and reasonable force, which amounts even to killing, may be subsequently justified in court. If troops are called to assist, the situation is usually described as one involving "the use of troops in aid of civil authorities." Congress empowers the president to send troops at his discretion for this purpose on petition from the governor of a state; and the president has on occasion sent troops over a governor's objection to enforce the laws of the United States. This is still analogous to quelling a riot, in that civil authority is supposed to be supreme and judicial processes may be ignored or suspended only when it is "reasonable" to do so. The same situation may, however, be described as a state of martial law. A proclamation of martial law by the governor does not establish but only proclaims the fact of its existence. This "fact" means in theory that the disorder is such that no court can remain open; but a court which desires to sustain the executive may easily find analogies to prove that even though it is actually open, it is nevertheless closed in legal contemplation. This result has been reached either upon the theory that the determination of the existence of martial law by the governor will not be questioned by a court if there is any reasonable evidence to support it, or upon the theory that martial law may exist even where courts are open if the danger is such that it is inadvisable for them to act. Nevertheless, even a court which has lost jurisdiction by admitting the existence of martial law may take jurisdiction later to penalize the "unreasonable" exercise of martial law by the executive.

In actual result, practically everything that can be done under the phrase martial law can also be done by the use of troops in aid of civil

authorities. Persons may be shot, clubbed or incarcerated under the cloak of either phrase. Only when it becomes necessary to justify a formal trial and punishment by a military commission is "martial law" essential. The phrase military commission does not describe any particular form of organization, but is merely an escape from limitations of courts martial jurisdiction over civilians. It is difficult to see how logically the sentence of such a commission could run beyond the period of martial law; but on this as on most questions there is a split of authority.

Judicial interpretation of the legal situation occurs, during the existence of a disorder, by habeas corpus proceedings or afterwards in a suit for damages or, more rarely, in a criminal prosecution. It makes little practical difference whether the situation is described as martial law or one involving the use of troops in aid of civil authorities. Habeas corpus cannot issue in a state of martial law, because theoretically no court is sitting to grant it. If the troops are in aid of civil authorities the writ may be "granted," but its execution "suspended" on the ground of necessity. Hence it is said that even the suspension of the writ of habeas corpus does not necessarily mean that martial law exists. The liability of military commanders in either situation is limited by the vague term "reasonable conduct"; and subordinate officers or troops are not liable for obeying orders which are not apparently unreasonable. There seems therefore no particular advantage in an executive proclamation of martial law except for its emotional effect on the public or to justify punitive sentences of military commissions extending beyond reasonable detention for the preservation of order. Possibly because martial law has an unpopular connotation, army regulations provide only for the use of troops in aid of civil authorities.

Just as the phrase martial law merges into troops in aid of civil authorities, so the latter phrase is capable of disappearing into the maze of chancery powers when it is desired that the armed forces should seem incident to the functions of the judiciary rather than the executive. Injunctions have been issued which have served the same purpose as a proclamation of martial law. In 1877 federal troops were under the command of officials of the federal court (*Secor v. Toledo, Peoria & Warsaw Ry. Co.*, 21 Fed. Cas. 968, and *King v. Ohio & Mississippi Ry. Co.*, 14 Fed. Cas. 539), whose military measures were supported by contempt proceedings. In 1895 the

Supreme Court of the United States (*In re Debs*, 158 U. S. 564) was seeking among the peaceful analogies of injunctions against nuisances to reconcile actual control by troops with the supremacy of the court. "It was not the soldiers that ended the strike," said Mr. Justice Brewer approvingly quoting Eugene Debs. "It was simply the United States courts that ended the strike." Thus the term martial law is avoided in such situations, and the courts remain "open"; it is only their customary attitudes and procedures which are "closed." The repeated attempts to analyze the doctrine of martial law arise from the paradoxical necessity of suppressing disorder by means which the common law itself has declared illegal. The function of the phrase is thus to give the appearance of legality to action which has neither legislative nor common law sanction. Once that purpose is understood, the causes of the increasing verbal confusion become clear.

Since the term martial law is not used except to describe the suspension of ordinary protective maxims and procedure of domestic courts, it is not difficult to make formal distinctions between it and such concepts as "the laws and customs of war," and "military law and military government." The laws and customs of war are rules of international law, derived from usages and international agreements such as the Hague and Geneva conventions. Military law (*q.v.*) is the law applied to troops in peace as well as in war. It is codified principally in the Articles of War, and it is administered for the most part by courts martial, which theoretically have no jurisdiction to enforce martial law, because the Articles of War do not contemplate jurisdiction over civilians. Military government is a descriptive term which applies to any form of government by an army with or without the aid of civil authorities. Theoretically it cannot be established over citizens in domestic territory unless a revolt has become sufficiently serious to justify the recognition of the rebels as "belligerents." It is set up in enemy or alien territory, in war, or in pursuance of treaty rights, or for the protection of the lives or property of nationals.

These distinctions arise from attempts to use old words in modern situations. They had no meaning in connection with the early Court of the Constable and Martial, from which the term martial law arose. That court possessed a broad and somewhat vague jurisdiction over feats of arms and heraldry, but also over such matters as appeals of death or murder committed beyond

the sea, and offenses of soldiers contrary to rules of the army. It represented the military aspects of feudal government. After its disappearance the term martial law justified the exercise of the king's prerogative, in peace as well as in war. In 1628 Parliament, in the famous Petition of Right, forced the consent of the king to the abolition of what was then called "martial law" but later commentators agreed that this abolition was not intended to extend to times of war or insurrection. The king's prerogative was supposed to furnish one of the theoretical sanctions for the control of such situations. So long as martial law was supposed to be possible only during war no peculiar distinctions were necessary.

Lieber in his famous orders for the Union armies in the American Civil War uses martial law to include both military law, the customs of war, and military government. But the nice analysis of the term in the United States began also with the Civil War and received its most famous expression in the Milligan Case [71 U. S. 2 (1866)]. A military commission had sentenced Milligan to death for activities in Indiana during the Civil War. In granting habeas corpus the majority of the court attempted to outlaw martial law by limiting it to times of complete anarchy, basing it on necessity rather than legality. The minority, however, considered it proper where, although courts were open, it was inadvisable for them to act. Since the Milligan Case the most celebrated instances involving the applicability of martial law have been in labor troubles. In the Colorado strike in 1904 practically all the extreme powers except sentences by a military commission were justified without overruling the Milligan Case under the pretense that the case involved merely the use of troops in aid of the civil authorities [*In re Moyer*, 35 Col. 154, 159 (1905), *Moyer v. Peabody*, 212 U. S. 78 (1909)]. In West Virginia, because a sentence by a military commission was involved, the court rested a refusal to grant habeas corpus on the theory that the reasonable determination of martial law by the governor was not to be questioned (*State v. Brown*, 71 W. Va. 519). In Montana under similar circumstances the court denied validity to the jurisdiction of a military commission (*In re McDonald*, 49 Mont. 454). The weight of authority is supposed to be with the Montana case, yet the possibilities under even the Montana doctrine of justifying any reasonable action by the executive in putting down disorder with the assistance of troops are

such that there seems little difference in practical effect between the theories. It is usual, however, to criticize the West Virginia cases and to assume that the Montana view offers greater protection against arbitrary power.

In England since 1876, probably because of liberal legislative provisions concerning trade unions, the concept of martial law has not been developed in labor disputes. The important cases have arisen from the Boer War and the Irish insurrections. The celebrated Wolfe Tone case in 1798 (243 State Trials 613) was formerly the authority cited for the notion that no man could be punished by a military court so long as there existed a civil court to grant habeas corpus. Later cases, notably the *Marias Case* in 1899 and the cases of *In re Allen* (1921) and *Ex parte Childers* (1923), gave support to the theory that if war is immediately threatened martial law may be applied even though courts are open; the determination of this necessity is for the courts, but once a state of war is proved the judiciary will no longer interfere with any act of the military. It has been customary in England to pass an act of indemnity for the protection of officials administering martial law; thus there is involved a recognition that the older theory of the Wolfe Tone case may still have validity as an argument.

By the passage of the Emergency Powers Act, inspired by a threatened strike in 1920, the English Parliament has probably made the conception of martial law obsolete by substituting for it special legislative sanctions. This act governed the general strike of 1926. Separate acts similar thereto have been passed in Ireland. In India extraordinary powers are exercised by summary courts sitting in chancery by virtue of detailed colonial ordinances, which do not mention martial law. Martial law conceptions may still be conceivably relevant if the Emergency Powers Act does not go far enough for the particular disorder, but in view of its detailed provisions this is improbable. The emergency provisions can be called into effect by royal proclamation for the period of one month. Parliament then convenes within five days and may terminate their operation by resolution. Punishments are limited to three months, and general regulations affecting transportation, health, food and the like are put into effect by various executive boards.

On the continent and in Latin American countries a common legal justification of drastic military action in emergencies follows the French

pattern, which regulates a "state of siege." Since no justification for executive rule was required under the theory of a monarchy, the idea of martial law did not develop in France until after the revolution. In 1791 the Assembly borrowed the term from English law and by special act provided for military control on executive proclamation of a state of disorder. In 1791 military control of the Field of Mars under the martial law concept created such popular resentment that this particular term had a short life; it was abolished in 1793. In 1791 the phrase "state of siege" was first used by the Assembly to describe military control in a civil community actively besieged by a foreign enemy. It was used in opposition to "state of war," which might exist over a wider area without necessarily displacing civil authority. From this description of an actual military state of siege the fictitious, or political, state of siege developed. The conditions under which a state of siege could be declared received their final legislative expression in 1849, except for the supplementary act of 1878, which among other provisions contained one limiting it to armed insurrection in time of peace—a result of unpleasant memories of declarations of a state of siege during the Second Empire.

Under the French law the state of siege might be put into effect by an executive declaration by the president of the republic if the chambers were not in session, but in such a case it was required that they be immediately convened for the purpose of ratification. The law or decree declaring a state of siege had to indicate the areas to which it was to apply and to limit its duration in time. It had become a matter of pride among French writers that the state of siege was limited by preestablished law, resulting only in the transfer of limited powers, regulated in advance, from the civil to the military authority. These powers in general consisted of authority to direct or supersede the civil police in the exercise of their ordinary functions and included jurisdiction of military courts over civilians for a wide variety of offenses and the abrogation of certain defined restrictions on individual liberty.

A comparison of legal terminology used in different countries without comparing the organizations which use that terminology, although frequently indulged in, is of course mere pedantry. From a purely dialectic point of view it might be assumed that the preestablished limitations of the state of siege are more consistent

with the ideal of a rule of law than is the unlimited dictatorship following a declaration of martial law in the United States. Yet it must be remembered that on the continent as well as in America, such phrases are accompanied by escapes, verbal or procedural. In France official action is governed by the Conseil d'État. The *droit administratif* laid down by this body has no similarity to the American conception of administrative law. It is supposed to include regulation of officers, as opposed to decision of private disputes. For example, in 1913 in order to break up a railroad strike, the French minister of war called the employees into military service in order to subject them to military discipline. His action was sustained by the Conseil d'État on the ground that the minister of war acted reasonably in regard to national safety. No reference to any particular legal doctrine was thought necessary, and no state of siege was declared. The power of the Conseil d'État to affect the operation of legal rules without any formal repudiation of them is again illustrated during the war. When the president of the republic changed many existing provisions of law during the state of siege which had been declared over the whole of France, he was sustained by the Conseil d'État under its jurisdiction to review official action in emergency. In the United States the same result could have been accomplished only first by the executive's declaration that the courts were unable to function, because of disorder, and second by refusal by the courts to look at the facts behind the declaration of the executive—an elaborate logical device made unnecessary in France by the existence of a separate court passing on official action. Under such a system as this it is easy to find a judicial warrant for the existence of a preventive censorship during the war which seemed to go beyond the requirements of the state of siege. It was not even put to a judicial test. The Court of Cassation, the highest civil law court, attempts precise legal definition. The Conseil d'État passes on the justification of administrative officers in departing from these legal definitions. Thus inconsistent results from these two bodies may easily be reconciled by the French argumentative technique. The question of the social justification of the extreme war measures taken by the French is obviously irrelevant here.

Even before the war some continental countries had refused to follow French argumentative technique for the justification of emergency

action. Thus, in Belgium, where French law had originally been in force, it was generally agreed that a political state of siege would be unconstitutional because the constitution expressly provided that it could never be suspended in whole or in part. In case of domestic disorder the practise was for the civil authorities to call in the military—a practise obviously closely resembling the American "use of troops in aid of civil authorities." When the World War came the military state of siege had to be regulated by royal decree. The original situation in the Netherlands, where French law had also once applied, was somewhat similar, but after a constitutional amendment a military and political state of siege was finally regulated by a law of 1899.

The conceptual opposite of the state of siege is found in the term "law of circumstance" in emergencies, which is something like the martial law concept without its dialectic embroidery. Germany, which before the Weimar constitution had used the term "state of siege"—the Prussian law on the subject, had, because of complicated constitutional provisions, become the law for the whole empire except Bavaria—abandoned it under that instrument, which in article 48 created practically a legalized dictatorship in emergencies. In Italy until 1926 there was no general regulation of a state of siege but when necessary it was, nevertheless, always declared by royal decree with such varying incidents as were necessary in view of the particular disorder. In 1926 the Fascist regime secured the legal regulation of a "state of war," and a "state of public danger." Today Mussolini, as the head of the government, may cause decrees to be issued without interference either by the council of the Fascist party or by Parliament. In such a situation obviously, phrases coined for the purpose of control of the executive by the judiciary are of little importance.

England, with its Emergency Powers Act of 1920, may be said to be turning toward the continental pattern, although it still retains for possible use the theory of martial law as a handy dialectic tool. The difference in result between a preestablished code relating to disorder, and the dictatorship possible under the American concept of martial law and the newer types of continental regulation, depends on psychological factors which are difficult to appraise. Given a situation which arouses sufficient fear in a governing class, no formal rules can ever prevail. On the other hand, the inhibitory effect of

advance regulation is by no means unimportant. Hence it does make a difference whether the regulation of disorder is provided for in advance or left to the realm of loose inspirational ideals. Certainly the ideals of the Milligan Case make fine argumentative material for speeches against military control of labor difficulties. Yet by the denial of an intermediate situation where regulation by a more summary process than that afforded by ordinary procedure might be advisable, they force the creation of logical escapes from these ideals. The opinion of the Milligan Case was not written with the ordinary sort of domestic disorder in mind. The court was concerned rather with the reconstruction of the South, and in view of the apparent tendencies of the time it may well have been thought that no denial of executive power could be put too strongly. But the Milligan Case failed to appeal to the emotions of Congress and has become today only a definition of martial law. The emotional attitude which its splendid phrases induce does not allow admittance of the need for extraordinary procedure in emergencies, and as a result there is absolutely unregulated action in labor disputes. Martial law therefore can scarcely be regarded as more than a dignified phrase under which courts may, when they choose, abdicate their powers in favor of an unregulated executive without admitting that this is what they are doing.

THURMAN ARNOLD

See: MILITARY OCCUPATION; WARFARE; RIOT; STRIKES AND LOCKOUTS; REVOLUTION AND COUNTER-REVOLUTION; INSURRECTION; MILITARY LAW; COURT MARTIAL; COURTS, ADMINISTRATIVE; COURTS; HABEAS CORPUS; CIVIL LIBERTIES; INJUNCTION; MILITIA; POLICE.

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MARTIN, BON-LOUIS-HENRI (1810-83), French historian and politician. At the age of twenty Martin went to Paris, where he published novels, stories and plays, mostly on historical subjects. At the request of the publisher Mame he undertook an illustrated popular history of France which was to consist of forty-eight volumes and was to appear at the rate of a volume every fortnight. The first volume appeared in 1833; Martin considered it unsatisfactory, began the work again on the basis of a new conception and during the course of the next three years published the fifteen volumes which comprise the first edition of his *Histoire de France . . . jusqu'en juillet 1830*. Although by virtue of its pleasing style it enjoyed a great popular success and was reprinted without change in a second edition, the author was dissatisfied with the results of his hasty compilation and spent seventeen years in revising it. The third edition, concluding with the year 1789, in nineteen volumes (1837-54) constitutes a virtually new work; per-

meated with the spirit of contemporary liberalism and nationalism, it won widespread acclaim in middle class circles. Proceeding from a rather arbitrary reconstitution of Celtic civilization Martin discerns throughout the course of French history the influence of the *âme gauloise*, and traces in the very dawn of national history the outlines of the liberal ideas which triumphed in the French Revolution. The work went into a fourth edition (17 vols., 1855-60), which was brought up to date in his *Histoire . . . depuis 1789 jusqu'à nos jours* (8 vols., Paris 1878-85) and abridged in a *Histoire populaire depuis les temps les plus reculés jusqu'à nos jours* (7 vols., Paris 1867-85); it inspired many scholarly handbooks and thus had a great influence on the French public mind during the second half of the nineteenth century. The period covering the reign of Louis xiv and the decline of the monarchy have been translated from the third French edition by M. L. Booth (4 vols., Boston 1865-66). The section of the *Histoire populaire* covering the period since the French Revolution has been translated by M. L. Booth and A. L. Alger (3 vols., Boston 1877-82).

Since his youth Martin had been in contact with the Saint-Simonians and the leaders of the liberal party; he greeted the Revolution of 1848 with enthusiasm and his republican friends offered him a chair of history at the Sorbonne, which he was able to retain, however, for only three months. In retirement under the Second Empire he defended in his writings the causes of Italian unity (*Daniel Manin*, Paris 1859, 2nd ed. 1861; English translation, 2 vols., London 1862; *L'unité italienne et la France*, Paris 1861) and Polish independence (*Pologne et Moscovie*, Paris 1863). After the fall of the empire he aligned himself with Gambetta and the government of the national defense; he was elected deputy from the Aisne, his native province, in 1871 and became senator from the same department in 1876.

ED. ESMONIN

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MARTIN, RUDOLF (1864-1925), German anthropologist. After studying in the natural sciences with Weismann and in philosophy with

Riehl at the University of Freiburg, Martin became *Privatdozent* in anthropology at the University of Zurich, then professor from 1899 to 1911 and finally successor to Ranke as professor of anthropology at Munich. He worked out the propositions and methods of craniology and anthropometry, examined and compared the various schools and in 1914 published the fundamental *Lehrbuch der Anthropologie in systematischer Darstellung mit besonderer Berücksichtigung der anthropologischen Methoden* (2nd ed., 3 vols., Jena 1928). His instruments for body and skull measurement and his tables of eye colors are widely employed by anthropometrists. Of his special works the classical examination of *Die Inlandstämme der malayischen Halbinsel* (Jena 1905), which portrayed the Senoi and Semang as two typical representatives of the Vedda and Negrito racial stocks, is particularly significant. In his last years Martin achieved exceptional success in the body measurements of school children. He is regarded as the last brilliant representative of the classical, descriptive and comparative anthropology in Germany.

EUGEN FISCHER

Works: *Anthropologie als Wissenschaft und Lehrfach* (Jena 1901); *Wandtafeln für den Unterricht in Anthropologie, Ethnographie und Geographie* (Zurich 1902); *Körpererziehung* (Jena 1922); *Anthropometrie* (Berlin 1925, 2nd ed. 1929).

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MARTINEAU, HARRIET (1802-76), English author. Her earliest publications were for the most part religious articles and tracts written from a Unitarian standpoint. When she was thirty years old, however, she became estranged from the Unitarian church and remained hostile to organized religion until 1851, when she came under the influence of positivism. In 1853 she published *The Positive Philosophy of Auguste Comte, Freely Translated and Condensed* (2 vols., 3rd ed. London 1893), a work which Comte himself accepted as an authoritative statement of his creed.

Harriet Martineau is famous chiefly as a popularizer of economics. In *Illustrations of Political Economy* (25 vols., London 1832-34), *Poor Laws and Paupers Illustrated* (10 vols., London 1833-34) and *Illustrations of Taxation* (5 vols., London 1834) she attempted to embody in stories

and fables the leading doctrines of Malthus and Ricardo. These stories were praised by some critics for their vividness and interest and attacked by others, both because they showed signs of hasty compilation and inadequate economic knowledge and also because instead of genuinely illustrating in plot and action the working of economic laws they merely incorporated a mass of economic material in the form of more or less irrelevant dialogues and disquisitions. Nevertheless, they were immensely popular and influential with the general public.

In 1834 Harriet Martineau went for a two years' visit to America, where she incurred great unpopularity by her open support of abolitionism. Her opposition to slavery led her to question the laissez faire assumptions upon which her economics had been based, and in *Harriet Martineau's Autobiography* (written about 1855, published in 2 vols., Boston 1877, with memorials by Mrs. M. W. Chapman) she gave expression to utopian views regarding the prospects of social reconstruction.

LINDLEY M. FRASER

Consult: Miller, Mrs. F. Fenwick, *Harriet Martineau* (London 1884); review article in *Edinburgh Review*, vol. lvii (1833) 1-39, and in *Quarterly Review*, vol. xlix (1833) 136-52; Escher, Elisabeth, *Harriet Martineau's sozialpolitische Novellen* (Weida 1925); Bosanquet, Theodora, *Harriet Martineau: an Essay in Comprehension* (London 1927).

MARTINEAU, JAMES (1805-1900), English divine and philosopher. Martineau was born in Norwich of a family originally sprung from Huguenot refugees. After a period of training as a civil engineer he decided to prepare for the nonconformist ministry. By lifelong conviction he was a Unitarian Christian and theist, and in Liverpool and London he exercised extraordinary influence as a preacher and writer on religious philosophy.

Martineau was influenced through both sympathy and opposition by most of the leaders of English thought in the nineteenth century and enjoyed personal relations with many of them. In particular Herbert Spencer in England and Comte in France afforded the opposition needed to stimulate the critical development of his own thinking, which finds its most systematic and elaborate exposition in his three greatest works, *Types of Ethical Theory* (2 vols., Oxford 1885; 3rd ed. 1889), *A Study of Religion* (2 vols., Oxford 1888; 2nd rev. ed. 1889) and *The Seat of Authority in Religion* (London 1890, 5th ed. 1905). Deity was to Martineau a concrete per-

sonal being ruling the universe and holding moral relations with mankind; and God and the soul were to him two absolutely self-luminous truths, which formed the controlling center of all his critical and constructive work in theology and philosophy. For him the interpretation of man is the interpretation of the universe; and what is essential in man is reason, conscience and will. Accordingly after an examination and rejection of the claims of infallible churches and infallible books he finds the seat of authority in the reason and conscience of man, not of any individual man but of mankind. His religion was what he believed the personal religion of Christ to have been. Christ he regarded as an ideal to be revered and followed rather than an authority to be worshiped. What the present day reader misses in these works is any adequate discussion of the problems arising out of the origin, development and historical organization of religion and morality; but these questions came to the front after Martineau's principal work as a thinker was done. His moral philosophy is of the historical English type—a patient analysis of the form and nature of the moral consciousness itself, which he carries out with brilliancy and insight. But his interpretation has been widely criticized on the ground that it is no longer possible to maintain a theory of conscience as a special faculty, making its pronouncements immediately and without reflection upon circumstances and consequences, stations and duties. Martineau has but slight sympathy with the emphasis on the social aspect of morality, which looms so largely in recent moral philosophy of both the evolutionary and the idealistic types; but his theory of conscience as judging upon the comparative moral worth of our springs of action leaves room for a far reaching recognition of moral development in its personal and indirectly in its social aspects.

S. H. MELLONE

Consult: Drummond, J., and Upton, C. B., *Life and Letters of James Martineau*, 2 vols. (London 1902); Sidgwick, H., *Lectures on the Ethics of T. H. Green*, Mr. Herbert Spencer, and J. Martineau (London 1902); Carpenter, J. E., *James Martineau, Theologian and Teacher* (London 1905); Mellone, S. H., "Unitarianism of J. Martineau" in *The Price of Progress, and Other Essays* (London 1924) ch. vi.

MARTÍNEZ DE LA MATA, FRANCISCO, seventeenth century Spanish mercantilist. In his *Memorial . . . en razón del remedio de la despooblación, pobreza y esterilidad de España* (n.p. 1650, reprinted in Campomanes' *Apéndice*, vol. i)

Martínez anticipated List to some extent by demonstrating the advantages of the coordinate development of agriculture and industry. He was swayed, however, by the superior profitability of industrial improvement, observing that in agriculture labor merely collaborates with nature and does not increase the natural value of products of the soil, while in industry labor enhances the value of the product a hundred-fold. In typical mercantilist fashion Martínez reckons Spain's loss from the abandonment of her industries as the difference between the value of raw materials and that of imported finished goods. The major portion of the *Memorial* is a diatribe against the use of foreign manufactures. The author holds foreign competition responsible for the depopulation and poverty of Spain, declaring that Spaniards have become vassals of other nations, since they pay a price for imported goods which includes a tax levied by a foreign sovereign. Foreigners are thereby enriched and enabled to make war on an impoverished Spain. Maintaining the self-sufficiency of Spain in technological skill as well as in raw materials he advises the expulsion of foreign workers, for they displace native labor and export treasure; but he urges Spaniards to imitate their thrift and industry.

The restoration of industry through the establishment of a prohibitive system would bring back to Spain the prosperity characteristic of the first years after the discoveries, when the specie of the Indies was exchanged directly for national products. Martínez describes money as "the soul which pervades and enlivens all the members of the body politic." Although he gives exaggerated figures on the export of precious metals and its consequences he shows clearly that it would be idle to try to restore prosperity and replenish the national treasury without restoring the arts. He praises conspicuous consumption and the use of luxuries, if manufactured at home, as means of increasing the circulation of money and creating work.

ROBERT S. SMITH

Consult: Conde de Campomanes, Pedro, *Apéndice a la educación popular*, 4 vols. (Madrid 1775-77) vol. i, p. 433-500; Sempere y Guarinos, Juan, *Biblioteca española económico-política*, vol. iii (Madrid 1804) p. 158-291.

MARTÍNEZ MARINA, FRANCISCO (1754-1833), Spanish historian and jurist. Martínez Marina, a member of the clergy, took a prominent part in politics as a fervent liberal, for which he suffered persecution in 1814 and 1823.

The scope and the scholarly character of his historical production as well as the fact that it is still highly authoritative entitle him to be considered the creator of the historiography of Spanish law. In order to provide a prologue for the edition of the *Siete partidas*, the code of Alfonso x, which was planned by the Real Academia de la Historia, he wrote his *Ensayo histórico-crítico sobre la antigua legislación y principales cuerpos legales de los reynos de León y Castilla* (Madrid 1808; 2nd ed., 2 vols., 1834); because of its comprehensiveness and thorough documentation this work constitutes the most valuable contribution to the historiography of the municipal charters and the mediaeval juridical institutions of León and Castille. The enthusiasm for liberalism which is often evidenced in this work aroused objections on the part of some of the academicians and as a result it was published separately by its author. Martínez Marina wrote his *Teoría de las cortes* (3 vols., Madrid 1813; vols. ii-iii 2nd ed. 1820) to defend his belief in constitutional government and to demonstrate against the affirmations of the absolutists that the parliamentary regime was not an outlandish innovation in Spain but that its introduction implied a restoration of the mediaeval political doctrines which had been suppressed by the foreign Hapsburg and Bourbon dynasties. His liberalism, however, carried him too far. When he declared that the origin of the Castilian Cortes is to be traced back to the national councils of Visigothic Spain he established the classic theory of the subject, but his view is totally inadmissible. Nevertheless, the work is of great value. Both in this and in the earlier study Martínez Marina suggested measures for combating poverty, the origins of which he found in the unjust and unequal division of the land and the products of the soil. He therefore advocated land redistribution, particularly by means of an intensive policy of disentanglement of ecclesiastical estates, the occupant to hold the land from the state subject to payment of a modest fee for its use. Martínez Marina made interesting contributions to philology and numismatics. He is responsible also for a very severe but well documented criticism of the *Novísima recopilación*, the revised code of 1805. He charged that it lacked order, method and exactitude, included contradictory, antiquated and irrelevant laws and omitted legislation that should have been included.

JOSÉ OTS Y CAPDEQUI

Other important works: *Juicio crítico de la Novísima*

recopilación (Madrid 1820); *Ensayo histórico de las lenguas señaladamente del romance castellano*, Real Academia de la Historia, *Memorias*, vol. iv (Madrid 1852); *Antigüedades hispano-hebreas convencidas de supuestas*, Real Academia de la Historia, *Memorias*, vol. iii (Madrid 1852).

Consult: Ots y Capdequí, José, "Los más grandes cultivadores de la historia del derecho español" in Universidad de Valencia, *Anales*, vol. iv (1923-24) 117-59; Bécker, J., *La tradición política española* (Madrid 1896); Costa y Martínez, J., *El colectivismo agrario en España* (2nd ed. Madrid 1915) p. 216-21.

MARTINOVICS, IGNÁCZ JÓZSEF (1755-95), Hungarian Franciscan, scientist, philosopher and political reformer. After having taught mathematics in the Franciscan School at Pest Martinovics became an army chaplain. In 1781 he set out on a tour of western Europe. During his sojourn in Paris he became imbued with the advanced political ideas then current among French intellectuals. From 1784 he taught physics at the University of Lemberg and seven years later was appointed court chemist by Leopold II. The liberal and reforming emperor, who like all the Hapsburgs followed the motto *Flectere si nequeo superos, Acheronta movebo*, employed the assistance of Martinovics against the Hungarian feudal class, which was thwarting his reform program.

When Leopold died in 1792 and was succeeded by the reactionary Francis II, Martinovics lost his position in the government and continued his political activity independently. In 1794 at the request of the Parisian Jacobin Club and for the purpose of promoting the ideas of the French Revolution in Hungary Martinovics organized two Masonic secret societies, in which he succeeded in including a large proportion of the influential Hungarian adherents of reform. At the same time he published a number of pamphlets, among them *Catéchisme de l'homme et du citoyen* (Vienna 1794), developing the doctrines of legal equality and republicanism on which the clubs were founded. Before revolutionary action was even attempted Martinovics and his associates were executed for treason in 1795; but in spite of its failure the Martinovics conspiracy, as it became known, was the chief ideological forerunner of the March days of 1848. Although recent investigators have substantiated Martinovics' duplicity and his willingness to serve the reaction, Hungarians still regard him as the first to echo the western ideas of freedom.

RUSZTEM VAMBÉRY

Other important works: *Oratio ad proceres et nobiles*

regni Hungariae (n.p. 1790; rev. Hungarian ed., n.p. 1791); *Testament politique de l'empereur Joseph II*, 2 vols. (Vienna 1791); *Oratio pro Leopoldo II* (n.p. 1792); *Status regni Hungariae anno 1792* (n.p., n.d.); *Systema universae philosophiae* (n.p. 1781).

Consult: Marczali, H., "Die Verschwörung des Martinovics" in *Ungarische revue*, vol. i (1881) 11-29; Gerando, A. de, *De l'esprit public en Hongrie depuis la Révolution française* (Paris 1848); Fraknoi, Vilmos, *Martinovics és társainak összeesküvése* (The conspiracy of Martinovics and his associates) (2nd ed. Budapest 1884); Pulszky, F., *Martinovics és társai* (Martinovics and his associates) (2nd ed. Budapest 1907); Szirmay, A., *A magyar Jakobinusok története* (The history of the Hungarian Jacobins) (Budapest 1889); Concha, G., *A reformeszmékről az 1790 körüli években* (The efforts at reform about the year 1790) (Budapest 1895); Fraknoi, Vilmos, *Martinovics élete* (Life of Martinovics) (Budapest 1921), with bibliography p. 213-22.

MARTINUS. See FOUR DOCTORS.

MARTOV, L. (Yuly Osipovich Zederbaum) (1873-1923), Russian socialist leader. Born in Constantinople of Russian Jewish parents, Martov turned revolutionary in 1891, the year of his admission to the University of St. Petersburg. From 1893 to 1895, while exiled at Vilna, he worked in the Jewish labor movement; at that time he formulated a theory justifying the separate organization of Jewish workers into a Marxian mass party, which was later the basis of the Bund. Upon his return to St. Petersburg he joined Lenin in founding the League of Struggle for the Emancipation of the Working Class. After three years of exile in Siberia he went abroad and with Lenin, Potressoff and Plekhanov's group edited the paper *Iskra* (The spark, 1900-05) established to fuse under Marxian leadership the heterogeneous revolutionary labor groups in Russia. At the second congress of the Russian Social Democratic Labor party in London in 1903 Martov led the opposition to Lenin's attempt to turn the party into a rigidly centralized organization dictatorially ruled by groups of professional revolutionaries and urged the building of a democratically organized self-governing proletarian party on the German model.

This was the beginning of the breach between the Menshevik and Bolshevik wings of the party, with their radically different conceptions of the character of the Russian Revolution, the role in it of the proletariat and the tactics of a proletarian party. During the 1905 revolution Martov was chief editor of the Social Democratic papers in St. Petersburg; in 1906-07

he worked with the Social Democratic representation in the First and the Second Duma; upon the collapse of the revolution he fought against extremism among the Mensheviks who wished to "liquidate" all underground revolutionary organizations and against anarchist-terrorist tendencies among the Bolsheviks. During the World War he opposed the war policies of the majority socialist parties in Europe and was one of the founders and leaders of the "internationalist" wing of the socialists, and at the international socialist conferences at Zimmerwald and Kienthal he occupied in opposition to Lenin a centrist position, advocating proletarian pressure to bring about peace without victory. Returning to Russia in May, 1917, too late to prevent the creation of a socialist-bourgeois coalition government, he led the internationalist minority of the Mensheviks who fought against the policies of the Kerensky government and insisted on a vigorous struggle for immediate peace and proposed a coalition government of all socialist parties including the Bolsheviks. In October, 1917, after the seizure of power by the Bolsheviks he continued his struggle for a socialist coalition; the plan gained the support of the workers and even the sympathy of some Bolshevik leaders but its progress was blocked by the stubborn resistance of Lenin and Trotsky. In the following years Martov urged the democratic observance of the Soviet constitution and condemned the tightening dictatorship and the terrorism of the Communist party; in 1918 in the period of "red terror" he published a pamphlet protesting vigorously against the re-establishment of capital punishment by the courts. At the same time he opposed armed resistance to the regime as likely to lead to internecine warfare and counter-revolution and supported the government against the "Whites" and foreign intervention. Regarding the revolution as essentially petty bourgeois and anti-feudal but radically affected by the presence of a numerous proletariat and the increasingly acute crisis of international capitalism, Martov held that objective conditions required the democratization of the Soviet regime and the gradual transformation of Russia into a democratic socialist republic based on an amicable collaboration between the urban proletariat and the freely organized peasantry. Although he was never molested personally, open political activity in Soviet Russia was made increasingly difficult for him; after the repression of the Social Democratic party by the Soviet government he went

abroad in November, 1920, and founded in Berlin the *Sotsialistichesky vestnik* (Socialist courier), which he directed until his death. He was also active in the reestablishment of the Socialist International, which had been disorganized during the war. He was one of the leaders of the so-called Vienna International (1921-23), and in the statutes of the Second International, which was founded after his death, were embodied the "Martov points" establishing the Socialist International as "the highest appeal for all socialistic parties, not only in war but also in peace."

Martov was a keen thinker and brilliant journalist. He was one of the editors of a four-volume history of the 1905 revolution and was also the author of a number of works on the history of the revolutionary and labor movements in Russia.

R. ABRAMOWITSCH

Important works: *Obshchestvennie i umstvennie techeniya v Rossii 1870-1905 godov* (Social and intellectual currents in Russia in 1870-1905) (Leningrad 1924); *Istoriya rossiyskoy sotsial-demokratii* (2nd ed. Moscow 1923), tr. by A. Stein with supplement by Th. Dan as *Geschichte der russischen Sozialdemokratie* (Berlin 1926); "Razvitie krupnoy promishlennosti i rabocheye dvizhenie do 1892 goda" (Development of large scale industry and the labor movement to 1892), and "Razvitie promishlennosti i rabocheye dvizhenie s 1893 do 1903 goda" (Development of industry and the labor movement from 1893 to 1903) in *Istoriya Rossii v XIX veke* (History of Russia in the nineteenth century), 9 vols. (St. Petersburg 1907-11) vol. vi, p. 114-62, and vol. viii, p. 67-156; *Mirovoy bolshevizm* (World Bolshevism) (Berlin 1923).

Consult: *Sotsialistichesky vestnik* (Socialist herald), vol. iii (1923) special issue of April 10, 1923, and no. 8-9, and vol. iv (1924) no. 7-8; Abramowitsch, R., "Julius Martow und das russische Proletariat" in *Kampf*, vol. xvi (1923) 180-88.

MARX, KARL (1818-83), social philosopher, revolutionary leader and founder of the chief current in modern socialism. Marx took as his starting point the great transformation which had occurred in Europe in the period preceding 1830 as a result of the industrial revolution in England, the political revolution in France and the intellectual revolution in Germany. Theoretically this transformation has found its definitive expression in the political economy of Smith and Ricardo, the writings of the historians of the French Revolution and Restoration and the German idealist philosophy from Kant to Hegel. It was the Hegelian philosophy that exerted the first lasting influence upon the youthful Marx, who combined idealistic striving with a

keen thirst for reality and together with other "left Hegelians," particularly Bruno Bauer, Arnold Ruge and Ludwig Feuerbach, set out to interpret this philosophy in a militant, atheistic and revolutionary spirit. Under the influence of these ideas he wrote in 1839-41 his doctor's dissertation on the materialistic philosophy of Epicurus and its theological criticism by Plutarch.

Instead of devoting himself to an academic career as he had originally intended, Marx turned to journalism, first as contributor and later as editor of the *Rheinische Zeitung*, an organ of the radical bourgeois opposition which was established in 1842 and suppressed fifteen months later. The practical lesson in the importance of so-called "material interests" derived from this journalistic experience coupled with the final upsetting of his original Hegelian idealism by Feuerbach's philosophy of real humanism led Marx to submit the speculative idealism of Hegel and of his left followers to a critical revision. His investigations, the results of which he embodied in part in the articles "Zur Kritik der hegel'schen Rechts-Philosophie" and "Zur Judenfrage" (in *Deutsch-französische Jahrbücher*, ed. by Marx and Ruge, Paris 1844, p. 71-85, and 182-214), led him to conclude that "legal relations and political forms cannot be conceived as autonomous phenomena nor as manifestations of the so-called general unfolding of the human spirit. They are rather rooted in the material conditions of life which Hegel after the fashion of the English and French of the eighteenth century summed up under the name civic society; the anatomy of this civic society is to be sought in its economics." Upon this realization Marx embarked in 1844 on the study of economics in Paris and after being expelled from France continued it in Brussels until the spring of 1848. A second attempt at political activity in Germany in 1848 having been cut short by the reaction following the revolutionary movement in the autumn of 1849, Marx resumed his studies in London, where he continued them unremittingly through the prolonged misery of an emigrant's life until his death.

The most important results of this phase of Marx' theoretical work are contained in the philosophical and economic manuscripts written in 1844 in Paris (first published in the *Gesamtausgabe*, pt. i, vol. iii, Frankfurt 1932); in *Misère de la philosophie* (Brussels 1847; tr. into German by E. Bernstein and Karl Kautsky, Stuttgart 1885; tr. into English by H. Quelch, Chicago

1910) written in reply to Proudhon's chief economic work *Système des contradictions économiques, ou philosophie de la misère* (2 vols., Paris 1846); and, finally, in *Zur Kritik der politischen Ökonomie* (Berlin 1859; tr. by N. I. Stone from 2nd German ed., New York 1904), which represents the first two chapters of a manuscript intended to cover the entire field of economics. This gigantic work of 1472 pages arranged in twenty-three books was completed between August, 1861, and June, 1863, but has never been published. Its place was taken by another work, planned on a less comprehensive scale, which was intended to consist of four volumes under the title *Das Kapital*. Of these only the first volume was completed and published in two different editions by Marx himself (Hamburg 1867, 2nd ed. by Marx 1873, 4th ed. by Engels 1890; French translation revised by Marx, Paris 1875; English translation by S. Moore and E. Aveling with a preface by Engels, 2 vols., London 1887; new English translation by E. and C. Paul, London 1928). The second and third volumes were edited by Engels from unpublished manuscripts (Hamburg 1885-94; tr. by E. Untermann, London 1907-09). As a substitute for the fourth volume, which was planned as a history of economic doctrines, Karl Kautsky compiled his *Theorien über den Mehrwert* (3 pts., Stuttgart 1905-10) from the original manuscript of *Zur Kritik der politischen Ökonomie*.

The essential theoretical achievement of Marx does not lie, as many believed, in the formulation of a new system of political economy on the basis of the classical concept of labor value and the socialistic conclusions drawn from it by the immediate successors of Ricardo, but rather in his radical criticism of the very principles of political economy and in his application of the so-called materialistic conception of history in the discovery of developmental laws of modern capitalistic economy. This new method of a science of history and society strictly empirical in procedure and Hegelian-dialectic in conceptual structure is the joint product of Marx and Engels. Until 1844 they each worked out independently the essential elements of this method. From that time until 1848 they gave it a more precise formulation in a series of joint critical and programmatic works: *Die heilige Familie* (Frankfort 1845) written against Bruno Bauer; *Die deutsche Ideologie* written in 1845-46 in Brussels against Bauer, Stirner, Feuerbach and the so-called German, or true, socialism (first

published in *Gesamtausgabe*, pt. i, vol. v, Berlin 1932); and the *Manifest der kommunistischen Partei* written in 1847-48 (London 1848; numerous later editions and several English translations entitled *The Communist Manifesto*). After 1848, while constantly exchanging opinions and continuing in essential agreement, the two independently applied the materialistic principle to the various domains of the economic, political and cultural life of modern bourgeois society and its antecedent stages.

Of equal importance with Marx' theoretical achievements is his work as a political and revolutionary leader. Within this realm Marx' effort presents two aspects. On the one hand, Marx as early as 1843 was in close contact with the most progressive manifestations of contemporary French socialism and communism. With Engels he founded the *Deutscher Arbeiterbildungsverein* in 1847 in Brussels. Soon afterward they joined the first international organization of the militant proletariat, the secret *Bund der Kommunisten*, at whose request they wrote the manifesto, in which they explicitly proclaimed the proletariat as "the only revolutionary class." On the other hand, during the actual revolutionary outbreak in 1848 Marx, then the editor of the *Neue rheinische Zeitung*, expressed views which while extremely radical and revolutionary yet essentially expressed the demands of bourgeois democracy. Only in the last months before the suppression of the paper in May, 1849, did he begin to emphasize proletarian class interests and this only in a rather abstract manner. Similarly in his publicistic activity during the revival of democratic movements of the late 1850's and 1860's in his numerous articles in Horace Greeley's *New York Tribune*, in the *New American Cyclopaedia* edited by George Ripley and Charles A. Dana, in Chartist publications and in German and Austrian newspapers Marx revealed himself chiefly as a spokesman of the radical democratic policies which, he hoped, would ultimately lead to a war of the democratic west against reactionary czarist Russia.

The explanation of this apparent dualism is to be found in the revolutionary doctrine patterned along Jacobin traditions which Marx and Engels adopted before the February Revolution of 1848, and to which they remained on the whole faithful even after the outcome of this revolution resulted in the breakdown of their hopes, although they realized the necessity of adjusting tactics to changed historical conditions and new practical experiences. This peculiar

Marxian theory of revolution, asserting the historico-transitional character of the working class movement which proceeds to the realization of its own proletarian revolutionary objectives and methods of class struggle through the bourgeois revolution, was rehabilitated in the twentieth century by the Russian Marxists, above all by the orthodox Marxist Lenin, who based upon it the theory and strategy of Bolshevism. The original Marxian theory of revolution, revived by Lenin, has been opposed by the other great branch of contemporary Marxism: since the end of the 1890's and more consciously since the World War social democrats who believe in reaching socialism through economic and political reforms have asserted that Marx and Engels, impressed with the rise of strong, independent class conscious labor organizations, began to drop their old radical theory of political revolution and to advocate an evolutionary policy based on the immediate defense of specific labor interests. Both the old and the new revolutionary syndicalism also have claimed certain elements of Marx' doctrine in justification of their own tendency to replace political action by direct economic action in the proletarian class war.

It is true that economic activity of trade unions and other forms of championing immediate specific labor interests acquired for Marx greater importance in his later years, as attested by his leading role in the organization and direction of the International Working Men's Association as well as by his contribution to the programs and tactics of the various national parties. But it is also true and it is clearly shown by his energetic battles within the International waged against the adherents of Proudhon and Bakunin that Marx had not abandoned his earlier views on the decisive importance of political action in the process of proletarian revolution. The most important documents which reveal this aspect of the later development of Marx' revolutionary theory of class struggle are his inaugural *Address and Provisional Rules of the International Working Men's Association* (London 1864) and the statute of the International; his essay *Civil War in France* (translated by E. Belfort Bax, London 1871; first published in *Volksstaat*, 1871), delivered as an address to the General Council of the International; his commentary on the 1875 program of the German Labor party (first published in *Neue Zeit*, vol. ix, 1891, no. 18; English version as *The Gotha Program*, ed. by Daniel De Leon, New York 1922); and the declaration of principles which Marx

wrote for the program of the Guesdist Parti Ouvrier Français (1880; published in Guesde, Jules, and La Fargue, P., *Le programme du Parti ouvrier*, Paris 1883). For a further elaboration of the specific elements in Marx' system of thought see MATERIALISM; CLASS STRUGGLE; SOCIALISM; ECONOMICS, section on SOCIALIST ECONOMICS; COMMUNIST PARTIES; SYNDICALISM.

KARL KORSCH

Works: Marx-Engels historisch-kritische Gesamtausgabe, pt. i, vols. i-ii, pt. iii, vols. i-iii (ed. by D. Ryazanov, Berlin 1927-30), pt. i, vols. iii-vi, pt. iii, vol. iv (ed. by V. Adoratsky, Berlin 1931-32) have appeared so far; they contain the most complete collection of works written by Marx before 1846, some of them printed for the first time, and the complete correspondence between Marx and Engels for the years 1844 to 1883. Important incomplete collections, including writings of the later period not otherwise available, are: *Aus dem literarischen Nachlass von Karl Marx, Friedrich Engels und Ferdinand Lassalle*, ed. by Franz Mehring, 4 vols. (2nd ed. Stuttgart 1913); *Gesammelte Schriften von Karl Marx und Friedrich Engels, 1852 bis 1862*, ed. by D. Ryazanov (D. B. Goldendach), 2 vols. (2nd ed. Stuttgart 1920), covering the years 1852 to 1856. The larger works published by Marx or, after his death, by Engels are available in new editions or recent reprints as well as in English translation. Important partial publications of letters are the following: *Briefe und Auszüge aus Briefen von Joh. Phil. Becker, Jos. Dietzgen, Friedrich Engels, Karl Marx u. A. an F. A. Sorge und Andere*, ed. by F. A. Sorge (Stuttgart 1906) pt. i; *Briefwechsel Lassalle-Marx*, ed. by Gustav Mayer (Berlin 1922); Marx, Karl, *Briefe an Kugelmann*, with an introduction by N. Lenin (Berlin 1924); *Die Briefe von Karl Marx und Friedrich Engels an Danielson (Nikolai-on)*, ed. by K. Mandelbaum, Neudrucke marxistischer Seltenheiten, no. 3 (Leipsic 1929).

Consult: Mehring, Franz, *Karl Marx* (4th ed. Leipsic 1923); Ryazanov, D. (D. B. Goldendach), *Marks i Engels* (Moscow 1923), tr. by J. Kunitz as *Karl Marx and Friedrich Engels* (New York 1927); *Karl Marx, Man, Thinker, and Revolutionist*, ed. by D. Ryazanov (D. B. Goldendach) (London 1927); Mayer, Gustav, *Friedrich Engels*, 2 vols. (Berlin 1933). On the philosophy of Marx: Labriola, Antonio, *Discorrendo di socialismo e di filosofia* (2nd ed. Rome 1902), tr. by Ernest Untermann as *Socialism and Philosophy* (Chicago 1907), and *Del materialismo storico* (2nd ed. Rome 1902), tr. by C. H. Kerr as *Essays on the Materialistic Conception of History* (Chicago 1904); Plekhanov, G., *Osnovnye voprosi marksizma*, ed. by D. Ryazanov (2nd ed. Moscow 1928), tr. by E. and C. Paul as *Fundamental Problems of Marxism* (London 1929); Lenin, N., *Materializm i empirio-krititsizm*, vol. xiii of his *Sochineniya* (2nd rev. ed. Moscow 1928), tr. by David Kvitko and Sidney Hook as *Materialism and Empirio-criticism*, vol. xiii of his *Collected Works* (New York 1927). On the economics of Marx: Engels, Friedrich, "Vorwort" in Marx, Karl, *Das Elend der Philosophie* (9th ed. Stuttgart 1921) p. v-xxiii, tr. by H. Quelch in Marx' *The Poverty of Philosophy* (Chicago 1910) p. 9-27; Engels, Friedrich,

"Vorwort" in vol. ii of Marx' *Das Kapital* (Hamburg 1885) p. iii-xxiii, tr. by Ernest Untermann in Marx' *Capital*, vol. ii (Chicago 1909) p. 7-29; Korsch, Karl, "Geleitwort" in his edition of Marx' *Das Kapital* (Berlin 1932) p. 5-33. On Marx' work in current history and politics: Ryazanov, D. (D. B. Golden-dach), "Karl Marx über den Ursprung der Vorherrschaft Russlands in Europa" in *Neue Zeit*, supplement no. v (1909), and "Karl Marx und Friedrich Engels über die Polenfrage" in *Archiv für die Geschichte des Sozialismus und der Arbeiterbewegung*, vol. vi (1916) 175-221. For critical estimates of Marx' system see: Bernstein, E., *Die Voraussetzungen des Sozialismus und die Aufgaben der Sozialdemokratie* (Stuttgart 1899), tr. by E. C. Harvey as *Evolutionary Socialism* (London 1909); Sorel, G., *La décomposition du marxisme* (2nd ed. Paris 1910); Korsch, Karl, *Marxismus und Philosophie* (2nd ed. Leipsic 1930); Hook, Sidney, *Towards the Understanding of Karl Marx* (New York 1933).

For a comparatively complete bibliography of Marx' works see Drahn, Ernst, *Marx-Bibliographie* (2nd ed. Berlin 1923). A useful record, although not without errors and omissions, of the non-Russian literature on Marx published from 1914 to September, 1925, is Czöbel, E., and Hajdu, P., "Die Literatur über Marx, Engels und über Marxismus seit Beginn des Weltkriegs" in *Marx-Engels Archiv*, vol. i (1925) 467-549.

MASCOV, JOHANN JACOB (1689-1761), German historian. After studying at Leipsic and traveling through France, England and Italy Mascov received his degree of doctor of laws from the University of Halle in 1718. The following year he was appointed professor of public law at the University of Leipsic. In 1741 he became municipal proconsul in Leipsic and he was for many years a member of the Saxon *Landtag*.

Scientific historical research as it gained ground after the decline of humanism, especially in France, and as it was developed by the Maurists was utilized above all in the field of ecclesiastical history. Mabillon, Tillemont, the abbé Fleury and Lecoite all worked upon themes in this field. Mascov took over their critical methods but employed them for a new subject, national history. While his German contemporaries, such as von Bünau, had a purely juristic interest in the development of the German kingdom and its law, Mascov in his *Geschichte der Deutschen bis zu Anfang der fränkischen Monarchie* (Leipsic 1726; tr. by T. Lediard, London 1737) traced the origins of the German nationality from its first contacts with the Romans in the Cimbrian war in order to show that the genius (*génie*) of the nation, whatever it might take over from foreign peoples, remains basically autochthonous. Where no au-

thentic tradition existed, as in the case of the origin of the Germani, Mascov preferred to remain silent rather than to lose himself in vague fantasies. But he employed critically all available sources, including coins, inscriptions and monuments. He attached little importance either to "the beauty of interpolated speeches" or to miraculous tales of heroes found so frequently in the writings of humanistic historians, but stressed exactness and reliability of dates, which he determined by means of detailed citations and established by comparative study of the information contained in the sources. In his *Geschichte der Deutschen bis zu Abgang der merovingischen Könige* (Leipsic 1737; tr. by T. Lediard, London 1738) Mascov continued his work on German history from Clovis to Pepin (481-752), writing in the same scientific but vivid narrative style that had characterized his earlier volume. For this period his work had been preceded by that of the Frenchman Gabriel Daniel, who in his *Histoire de France* (1713) had purged Merovingian history of many fables.

With these histories Mascov brought to a certain measure of fruition that which for Leibniz had existed merely as a program or at most had remained in unpublished manuscript form. The two works quickly achieved an international reputation and were translated into French, English, Italian and Dutch. They were esteemed because of their almost Tacitean emphasis upon facts both in style and general conception. Nor did Mascov permit himself to be carried away by nationalistic excesses, as did the humanists. He only traced with amazement the way in which the Germanic tribes in conflict with the superimposed Roman culture "to a certain extent developed as a result of their very defeat." It was not until the time of M. I. Schmidt toward the end of the eighteenth century that there appeared another history of the Germans as readable as Mascov's.

After completing his German history Mascov wrote in Latin his *Commentarii de rebus Imperii romano-germanici* (3 vols., Leipsic 1741-53), which dealt with mediaeval history but went only as far as Conrad III. The remainder of his literary production consists of textbooks for academic instruction. His *Principia iuris publici Imperii romano-germanici* (Leipsic 1729, 5th ed. 1759) achieved such prestige that lesser authorities on public law, such as Börner, Stainhauser and von Ludewig, composed commentaries upon it. In this book he explained the German governmental organization and its law in terms of his-

torical development. Masdev's reputation brought him many students from foreign countries as well as from Germany and his excellence as a teacher caused his influence to be far reaching.

RUDOLF STADELMANN

Consult: Voigt, Georg, "Johann Jacob Masdev" in *Historische Zeitschrift*, vol. xv (1866) 327-58; Goerlitz, Waldemar, "Die historische Forschungsmethode Johann Jacob Masdevs" in *Leipziger Studien*, ed. by G. Buchholz, K. Lamprecht, E. Marcks, and G. Seeliger, vol. vii, pt. iv (1901); Treitschke, Richard, "Ueber Jakob Masdev und seine Zeit" in *Allgemeine Zeitschrift für Geschichte*, vol. viii (1847) 146-84; Wegele, F. X. von, *Geschichte der deutschen Historiographie*, Geschichte der Wissenschaften in Deutschland, Neuere Zeit, vol. xx (Munich 1885) p. 662-78, 683-87.

MASDEV, JUAN FRANCISCO (1744-1817), Spanish historian. Masdev, a Jesuit, was compelled to leave Spain when his order was expelled by Charles III in 1767. Except for a brief interval in 1799 he lived in Italy until near the end of his life. Very much an eighteenth century Spaniard, he displayed in addition to wide and solid culture and critical ability a sometimes excessive fervor for things Spanish in the face of the Hispanophobia fostered by the *philosophes*. His works, which include critical, polemical and satirical writings, cover the fields of poetry, grammar, religion, canon law, politics, archaeology and sacred biography. But he stands out particularly as a historian. His celebrated *Historia crítica de España y de la cultura española* (20 vols., Madrid 1784-1805; vols. i-ii first published in Italian, Foligno and Florence 1781-87) has been termed by Menéndez y Pelayo "an extraordinary work, an outstanding monument of scholarship and patience." Its contents nevertheless are of uneven merit and many of its statements have been severely attacked. The author's pronounced critical spirit becomes an exaggerated iconoclasm when turned against persons and institutions not to his liking, and rather than remaining a history in a strict sense the work constitutes a complex mass of critical dissertations. In spite of its defects its appearance marks an important moment in the history of Spanish historiography. Besides being highly critical it abounds in valuable bibliographic and documental material and teems with suggestions; in it students seeking to clear up obscure points in the history of the nation have delved with profit. Although it does not go beyond the eleventh century it is still indispensable for the knowledge of certain periods. It sought to vindicate the Spanish nation and its culture, par-

ticularly before Italian opinion, and is thus an outstanding landmark in an ancient controversy. Moreover as a result of its motivation the work contains a highly important systematic attempt to discuss the national traits scientifically and often realizes the ample concept of the content of history which dominated the Enlightenment, and which Masdev shared. In the sphere of ecclesiastical history the author's exaggerated nationalism led to a passionate defense of the discipline of the primitive Spanish church against the reforms of Cluny and the intrusions of the church of Rome. Hence the work was placed on the Index *donec corrigatur* in 1826.

JOSÉ OTS Y CAPDEQUI

Other works: *Discurso sobre las pretensiones de la Francia, la libertad i la igualdad* (Valencia 1811); *Iglesia española* (Madrid 1841).

Consult: Ellas de Molíns, A., *Diccionario biográfico y bibliográfico de escritores y artistas catalanes del siglo XIX*, 2 vols. (Barcelona 1889-95); Altamira y Crevea, R., *Psicología del pueblo español* (rev. ed. Barcelona 1917); Menéndez y Pelayo, M., *Historia de los heterodoxos españoles*, 3 vols. (Madrid 1880-82) vol. iii, bk. vi, p. 194-96.

MASON, GEORGE (1725-92), American statesman. Mason, a descendant of cavalier stock which emigrated during the Cromwellian period, was one of the wealthiest slave owning Virginia planters, having considerable interests in shipping and in western lands. Although like many of the Virginia landed gentry he strongly opposed, as early as 1764, extension of British control over the colonies he did not resist very actively until July, 1775, when he took Washington's vacated seat in the Virginia Convention. A man of broad classical culture and considerable oratorical powers, he had great influence in formulating the fundamental law of the United States. The declaration of rights which he wrote became a model for all American states as well as a source of the French Declaration of the Rights of Man and probably of the Declaration of Independence. Mason was one of the principal draftsmen of the Virginia constitution adopted June 29, 1776, which served as the model for most state constitutions adopted in 1776 and 1777. The Constitution of the United States of 1787 does not in a number of respects represent the point of view expressed by Mason in the convention which framed it. He was especially opposed to its provisions for centralization of powers, a single executive and the election of the executive by indirect popular vote and to the absence of a bill of rights. He failed to win

approval for the limitation of the slave trade and special protection of southern economic interests. A large holder of confiscated loyalist lands, he attempted to protect such titles against suit which might arise as a result of federal treaties. At the same time he opposed any property restriction on the franchise and favored giving to the central government power to issue paper money and to enact sumptuary laws.

Mason was one of three delegates who remained to the end of the convention and refused to sign the completed document. In the Virginia Ratifying Convention of 1788 he was a leader in fighting ratification and was instrumental in securing the endorsement of a long bill of rights, largely on the basis of which the first ten amendments, adopted in 1791, were formulated.

B. F. WRIGHT, JR.

Consult: Rowland, Kate Mason, *Life of George Mason*, 2 vols. (New York 1892), including speeches, public papers and correspondence; Nevins, Allan, *The American States during and after the Revolution* (New York 1924); Beard, Charles A., *An Economic Interpretation of the Constitution of the United States* (New York 1913) p. 127, 205.

MASON, OTIS TUFTON (1838–1908), American anthropologist. After graduating from Columbian College in Washington, D. C., Mason became head of its preparatory school and later curator of anthropology in the United States National Museum. He was not a field anthropologist; he felt that anthropology required classification to insure advancement by systematic study and to that end he gathered and ordered attractively for future generalization vast materials from anthropological literature, especially first hand observations by explorers. He was a pioneer in the cataloguing of the races of man; his list of several thousand American tribal names begun in 1873 was the basis of the *Handbook of American Indians North of Mexico*, published by the Bureau of American Ethnology (Bulletin no. 30, 2 vols., 1907–10). In his important contributions to the study of aboriginal technology he stressed the necessity of knowing in detail the materials and the methods of construction; his publications on basketry, weaving and other aboriginal arts became models for later work in this field. He defined invention in terms of changes in the material used and the thing invented, changes in the apparatus and processes employed and changes in the mind of the inventor and in society; he therefore applied the term not only to mechanical devices but to cultural processes, language, fine arts, social

structures and functions, philosophies, creeds and cults. His discussion of the preparation of traps for the capture of animals among the Amerinds revealed the technical ingenuity and empirical psychological attitudes of the natives. In his study of the influence of environment upon human industries, in which he concluded that environment was the occasion—the conditioning mold—not the cause of specific industries he made a pioneer classification of the aboriginal culture areas of the Americas. He presented evidence of the fact that the symbolism of designs in primitive art varies in terms of the myths and culture of each tribe. His popular book on the participation of women in primitive culture dispelled the idea that women held a degraded status in primitive life and put forth the thesis that women since earliest times have specialized in the industrial arts while men engaged in the arts of war.

Many prominent anthropologists owe to Mason their first steps in unexplored fields of anthropology. The lucidity and charm of his widely read scientific writings make for their permanence.

WALTER HOUGH

Important works: *The Origins of Invention: a Study of Industry among Primitive Peoples* (London 1895); *Woman's Share in Primitive Culture* (New York 1894); "Aboriginal American Basketry: Studies in a Textile Art without Machinery," United States National Museum, *Annual Report*, 1902 (1904); "Influence of Environment upon Human Industries or Arts" in Smithsonian Institution, *Annual report of the Board of Regents 1895* (Washington 1896) p. 639–65.

Consult: Hough, Walter, in *American Anthropologist*, n.s., vol. x (1908) 661–67; Hrdlička, Aleš, in *Science*, n.s., vol. xxviii (1908) 746–48.

MASONRY, the most widespread fraternal order in the world, dates authentically from the foundation of the Grand Lodge of England on St. John Baptist's day 1717 by the union at London of four or more preexisting lodges. These local lodges, which were more or less numerous throughout Great Britain and Ireland even at that date, arose through the gradual transformation of the guilds of operative Masons into societies of non-Masons, for the promotion of sociability, conviviality and ideals of personal morality, equality, brotherhood and peace. The Masons' guilds, which developed during the long period of cathedral, monastery and abbey building from the twelfth century onward, are known to have been devoutly Christian, to have used the Bible in the reception of initiates or

apprentices and to have stressed fraternity and good work and the sacredness of the secret oath. The transformation from an operative to a speculative basis is accounted for by the decline of cathedral building and the rise of humanitarian and democratic theories during the seventeenth century. By the third quarter of that century lodges existed in which there were few, if any, operative Masons. With the decline of the practical advantages of the guild lodges, their already existent cult elements became of transcendent importance.

A remarkable feature of the old lodges was their mythology, which attributed the origins of Masonry to the times of Solomon, Noah or even Adam and traced the line of historical transmission therefrom. The first "Book of Constitutions" drawn up by James Anderson in 1723 on the basis of existing documents included considerable portions of this mythology. As slightly modified in 1738 this work still serves to give English Masonry its essential basis in the three degrees of the blue lodge—entered apprentice, fellow craft and master Mason. Nevertheless, the formation of the Grand Lodges of All England (York Rite) in 1725, of Ireland in 1726 and of Scotland in 1736, the continuance of various separate local lodges and the schism from 1751 to 1813 between the "Moderns," or adherents to the 1723 constitution, and the "Antients," or adherents to what was believed to be still older tradition, all served to perpetuate much individualism of ritual throughout the rapidly growing order. Even more important in accounting for the profuse efflorescence of myth, symbol and ceremony was the development in France after 1735 and later elsewhere of numerous degrees and branches of Scottish Masonry, superimposed on English Masonry, each new development accompanied by its authenticating story. Consequently many ingenious efforts have been made, even to this day, to prove that the order arose among the ancient Egyptians, Chaldees, Hindus, Greeks or Hebrews or that its symbols may be traced back to primitive societies. Few Masonic scholars now accept any of these views, which are almost universally looked upon as the romantic fantasies of wilful archaeologists.

Much the same may be said of the somewhat more realistic attempts to find origins in the Roman *collegia*, the Comacine Masters, the German *Steinmetzen*, the French *compagnonnage* and similar bodies. Striking similarities between these and the British Masonic guilds

there undoubtedly were; and on the theory of cultural diffusion lineal connection is plausible. But thus far no satisfactory evidence has been found connecting Freemasonry with any mediæval secret orders other than the English guilds. It seems certain that all lodges practising Masonry on the continent during the eighteenth century traced their lineage to one of the British lodges. Moreover no lodge of any time or place is recognized as regularly and officially Masonic which does not have this lineage.

The rapid spread of Masonry in the British Isles was due to the existence of local lodges, to the harmony between the ideals of Masonry and the new currents of religious and political thought and above all to the absence of an autocratic government and an absolutist church. The order was early sponsored by members of the nobility and thus given a social prestige appealing strongly to the successful members of the merchant, professional and literary classes. Its ideals of religious toleration based on an irreducible minimum of belief, personal and civic morality, liberty, equality and peace were essentially the ideals of the newly developing middle class; and its rapid diffusion is closely associated with the growth of trade, the spread of Protestantism and deism and the increased acceptance of liberal principles after the Revolution of 1688. These latter facts account for the opening of lodges throughout the world wherever English aristocrats, merchants, traders or governmental agents assembled. A not unimportant factor in this movement was the chartering of sea and field lodges with traveling warrants, begun by the Grand Lodge of Ireland in 1732 and generally adopted. Lodges were thus established wherever British military or naval forces were stationed.

The outstanding feature of the evolution of Freemasonry in the English speaking world has been the emergence of a high degree of order and system from the rivalries and chaos of the eighteenth century. In the first half of the century the grand lodges of England, Scotland and Ireland had each indiscriminately chartered lodges in the colonies and thus given rise to confusion of jurisdictions. After 1751 this had been aggravated by the rivalry between the Antients and Moderns, of which the former, less aristocratic in membership, were more favorable than the latter to colonial aspirations for independence. At the time of the American Revolution there are estimated to have been about 100 stationary and 50 military or movable lodges,

numbering among their members many generals of the army, signers of the Declaration of Independence and members of the Constitutional Convention. The thirteen or more colonial grand lodges, which before the end of the revolutionary era had chartered approximately 200 additional lodges, gradually declared themselves independent of their English antecedents and settled their conflicts of jurisdictions. At length the American system of one sovereign grand lodge in each state and the District of Columbia was clearly defined. A somewhat similar evolution has been followed in Canada and Australia, where there now exists one grand lodge for each province.

The period of conflicting jurisdictions was notable also for an extraordinary proliferation of degrees and rituals. The basic symbolism and primary degrees of Masonry are similar everywhere, but there have been so many independent jurisdictions and so many fertile inventors among its members that a bewildering variety of degrees and ceremonials has been engrafted upon the sturdy stock of Masonic myth and mysticism. Many new degrees were evolved, some of them more elaborate even than the thirty-three degrees of the Ancient and Accepted Scottish Rite. At the same time Masonry developed concordant orders, such as the Royal Order of Scotland and the Knights of the Red Cross of Rome and Constantine, and sponsored non-Masonic bodies to which only Masons are admitted, such as the Modern Society of Rosicrucians, the Sovereign College of Allied Masonic Degrees, the Veiled Prophets of the Enchanted Realm, the Ancient Arabic Order of Nobles of the Mystic Shrine and the Independent International Order of Owls. Various rites have become dormant or have died, and spurious and clandestine Masonic bodies have been organized by ambitious imitators.

This complex proliferation of forms resulted in a lack of unity of conception as to fundamental traits, which gave rise to the long discussion as to the "landmarks" of masonry. Some interpret these as immemorial practises; others as universal principles of Masonic jurisprudence; still others as ethical, religious or philosophical ideals which have imbued the order. While these differences persist, there is a reaction, in certain quarters, against explicit enumeration of landmarks with a tendency to identify them with any customs or principles serving to preserve the identity of the fraternity. In addition there are two major principles which are common to

Masonry throughout the entire English speaking world—insistence on belief in a Great Architect of the Universe and non-participation in political controversy. The religious tenet is broadly interpreted. Jews and Christians of all shades of religious belief, spiritualists and mystics, deists and theists, Mohammedans, Buddhists and Confucians, are eligible. Only avowed atheists are excluded. A Chinese lodge chartered by the Grand Lodge of Massachusetts uses the Bible, the Koran and the writings of Confucius in its ceremonies.

Despite this indifference to religious issues the main opposition to Masonry has come from religious bodies. Protestant opposition, which on occasion has taken the form of interdenominational organization, has been mainly on grounds of secrecy, and always spasmodic and ineffective. Catholic opposition, more articulate and persistent, has stressed not only secrecy but the moral and religious features of Freemasonry as well. Catholic antagonism to English Masonry may be attributed primarily to the fact that in claiming to cultivate moral character and spiritual welfare, Masonry challenges the basic assumption of Catholicism that it is the guardian of morality and the sole depository of that revealed religion through which alone, it believes, true morality can be attained. Yet within recent years there has been little evidence of active Catholic opposition in any part of the English speaking world. In the United States the authority of the church has not even been sufficient to prevent a considerable number of men of Catholic affiliation from joining the Masonic fraternity. The strong insistence of English speaking Masonry on the ideal of brotherhood, on freedom of conscience and on toleration, as well as the absence of class, caste or race requirements in its standards of admission, has given it a breadth almost unique among social institutions, and has established its reputation as a promoter of sociability and the civic virtues, but without special religious significance.

Nor, except for the famous Morgan incident in New York, has there been any noteworthy political opposition to the fraternity. The abduction of William Morgan after it had become known that he was about to publish a book ostensibly revealing the secrets of Masonry was a factor in the formation in 1827 of the Anti-Masonic party, which flourished in New England and the middle Atlantic states during the following decade. The Morgan incident seems of itself to have aroused some popular apprehen-

sion, but the decline of the National Republican party and the general political discontent of the period made it a timely episode, the psychological value of which was skilfully utilized for political purposes by Thurlow Weed, William H. Seward and others. During this period, known in Masonic history as the era of the persecution, lodges in some areas were entirely eliminated and membership sharply declined throughout America.

With this exception English speaking Masonry has succeeded almost entirely in keeping itself free from partisan politics. An act of the British Parliament of July 12, 1798, for the suppression of secret societies expressly exempted the Masonic order, and since then the necessity of avoiding all reference to controversial issues in lodge sessions has been constantly reiterated. In the democratic atmosphere in which it has developed it has been able to avoid the secrecy of a subversive political society and has found any sort of political controversy a source of self-destruction. The indirect political influence of the society may, however, have been considerable. In all English speaking countries it has included within its ranks a large proportion of men prominent in public life and has cultivated in its membership ideals of liberty, equality, freedom of conscience, justice and square dealing.

Theories as to the purpose and essential nature of Freemasonry have manifested a wide diversity. Its ideology is by no means uniform and, as Roscoe Pound has suggested, has been heavily conditioned by the successive climates of opinion which it has encountered since the eighteenth century. The temple which Masonry is building is sometimes the symbol of moral character; sometimes the human soul as the dwelling place of the Most High; sometimes, with an external reference, a human brotherhood devoted to ideals of liberty, equality, truth and justice. Integration of ideology is still further retarded by the rapid increase in membership, the pressures of modern life and the insidious influences of the scientific outlook and of urban civilization.

While there has always been a tendency among Masonic writers to couch their views of the purposes of the organization either in rationalistic or mystical terminology, Masonry does not seek the advancement of a cult; it has no sovereign remedy for social ills and projects no social utopia. It cultivates sociability and practises mutual benevolence while devoting itself

primarily to the prosaic and perennial task of encouraging the ordinary civic virtues. For the great body of members the attractions of the order are as varied as the range of human interests and psychic needs. There are direct and immediate practical profits and political, economic and social preferments as well as the more remote advantages of the Masonic mutual aid and philanthropies, especially homes for the aged and the orphaned. The basic appeal remains the spirit of fraternity, sociability and conviviality, reenforced by the personal satisfaction derived from membership in an extensive and respected organization. Closely associated therewith is the appeal of secrecy and of an ancient, recondite ritual.

The rapid spread of Masonry throughout continental Europe has evoked at various times romantic theories finding explanation of the diffusion in subtle and malicious intrigues for world domination on the part of Satan, the Jews, the Jacobites, the Rose Cross, the English or certain mysterious "unknown superiors." Catholics have seen in the order the work of the devil, but its persistent growth should make this theory distasteful even to the devout. Jews were not at first admitted to English lodges; their admission in Germany has never been generally approved; everywhere their numbers in the lodges have been small. The Jewish theory is merely another parallel of the myth of the Elders of Zion.

The Jacobite theory has given rise to endless research and controversy. It rests on the facts that after the dethronement of James II many of his supporters scattered to the continent, where they joined lodges or perhaps formed new ones; that many of his leading supporters were prominent Masons; and that the formation of the higher degrees which developed into Scottish Rite Masonry was begun in France following a famous address in 1737 by Chevalier Ramsay, known to have served the Pretender's family. Ramsay traced the origins of Masonry to a remnant of the Knights of St. John of Jerusalem who had found haven in Scotland. Thereafter Scottish Masonry rapidly expanded throughout central Europe. One of the most important Templar branches was the Order of the Strict Observance in Germany, which held the twin ideals of a universal Christian religion and a universal pontifical theocracy, was much imbued with magic, alchemy and necromancy and was generally believed to have served political purposes, possibly under Jesuit influences.

While the extent of Jacobite leadership in these developments is not yet clear, recent historians incline to the view that the higher degrees were not invented for ulterior political purposes but to satisfy the desire of the aristocracy and wealthy for distinction, and that the promotion of the cause of the Pretender was a minor influence in the rapid growth of the society. The influence of the Rose Cross is now recognized to have been slight and very probably limited to the introduction of additional mysteries and ideals of cult into the Masonry of Germany through the mediation of Wollner.

The true causes of the popularity of Masonry throughout Europe seem to have been its harmony with the spirit of the times, its diverse appeal at once to aristocrat and democrat, conservative and liberal, devout and free thinker, rationalist and lover of magic and esoteric rites. It was favored by the prestige of England, the attraction of visitors to London and the possession of Hanover by the English. Curiosity doubtless led many to join. Adopted by the upper classes, it became a key to personal promotion and to the satisfaction of vanity. More important were the appeals to the love of mystery in its myths, symbols, ceremonies, oaths, its secrecy and the obscurity of its phraseology. Its gradations and its pomp catered to the invidious distinctions of an aristocratic society. For many Masonry was a substitute for, or an addition to, their religion. Its insistence on belief in God and immortality (although German Masonry was Trinitarian), its use of the Bible and its emphasis on moral ideals appealed not only to devout Christians but to many types of faith in an age of universal intellectual awakening. Masonry arose with the beginnings of rationalism and free thought, when deism and "natural" as opposed to revealed religion were winning adherents, and it harmonized with the new and vital principle of religious toleration in a Europe weary of religious wars but not yet ready to break with theism or even with orthodox Christianity. This same diversity of appeal is shown in its political aspects, for whereas it was everywhere during the eighteenth century sponsored by the nobility, often by ruling houses, all identified with privileges of the feudal order, its spread concurred with the growth of middle class ideals of political and economic liberalism.

The growth of the order has been accompanied by the retention of a basic similarity amidst a profuse diversity. The similarity has been based on three traits: the three degrees of

the early English lodges; ideals of liberty, equality and humanity; and, during the first century and a half, the minimum religious tenet. Unity in the latter respect was disrupted in 1877 when the Grand Orient of France replaced belief in God and immortality with complete freedom of conscience, thereby alienating various English, American, German and Scandinavian grand lodges.

Diversity has resulted from two conditions: individualism of organization and variations of cultural milieu. Although some psychological and institutional unity is achieved through the organization of local lodges into grand lodges, each of the more than one hundred grand lodges is wholly independent of all others. Moreover, while each grand lodge is usually supreme for its particular branch of Masonry in its own country, state or province, rival branches have been numerous and still operate in many territories. Spurious orders have not infrequently enjoyed periods of prosperity, while the mask of Masonry has often been used by ambitious adventurers or conspiring cliques.

The main key to Masonic history is to be found in the extent to which its religious and political ideals harmonized with those of the ruling forces in the countries to which it spread. The theory of English Masonry, that the lodge itself should take no action on political or religious questions but should leave to its members the practical application of the principles inculcated by Masonry, has been openly repudiated in many continental quarters. In northern Europe Masonry has usually been regarded, in keeping with the English tradition, as a bulwark of the established order, but elsewhere as the most implacable enemy of morality, religion and social order. The alternating periods of prosperity and persecution which it has undergone reflect broader religious and political currents and countercurrents. Curiously enough it has sometimes flourished under the favoring eye of autocrats and languished under the suspicious frowns of radical democracies. It was quite consistently patronized by the Hohenzollerns, it flourished in Austria under Joseph II and was utilized by the Napoleons in France, Italy and Spain but was nearly destroyed by the French Revolution and completely so by the Bolshevik revolution.

The career of Masonry in northern and central Europe has been strikingly different from that in southern Europe. Generally favored by the ruling houses in Germany and Scandinavia,

and recruited from the upper classes, its history in the eighteenth century is mainly that of the rivalries of the Rosicrucians, the Order of the Strict Observance, the Illuminati and the Swedish rite; the admixture of fresh mysteries; and the efforts of impostors to capture it for private ends. It played a part of uncertain importance in the promotion of the *Aufklärung* movement in Austria and Russia, and in Germany under the leadership of Lessing, Herder, Goethe and Fichte it served to popularize humanitarian and cosmopolitan ideals. During the nineteenth century a large section of German Masonry under the leadership of the Prussian lodges remained pillars of constitutional monarchy and Protestantism, while another became more humanitarian and liberal. Since the World War intransigent enemies of republican institutions have, with little show of reason, charged Masonry with most of the evils of the times and with unpatriotic connivance with the French.

In southern and eastern Europe as well as in Latin America Masonry, strongly under influence of the Grand Orient of France, has been much more secular and rationalistic. In the presence of autocratic government and authoritarian religion the order has frequently been accused of treasonable plottings, inflammatory propaganda, moral subversion and the promotion of magic, alchemy and other mysteries. Religious opposition began with the papal bull of 1738, in which the order was denounced because its secrecy promoted disloyalty and its religious toleration encouraged schism. Many similar denunciations have since followed, none more violent than those of 1873 and 1884 declaring Masonry to be founded and promoted by Satan and to be devil worship. Although the bulls of 1738 and 1751 were not registered by the *parlement* and remained without effect in France, they gave rise to proscriptive legislation in Italy and Spain and everywhere marked the beginning of the ceaseless warfare between Masonry and clericalism. In Catholic countries Masonry gradually acquired the character of a subversive secret society and active champion of modernism, secularism and democracy in opposition to all forces seeking a renewal of mediaeval theocracy. With the increasing power of the state over the moral and spiritual life of the people the clash of Masonic and clerical ideals has of necessity expressed itself in the field of politics.

It is as yet, however, impossible to be quite certain as to the extent and nature of the political

activities of Masonic lodges in countries of Latin culture. Documentary evidence, such as it is, tends to destroy most of the myths which have until recently been generally accepted as to the role of Masonry in the French Revolution and subsequent uprisings in France, Spain, Portugal, Italy, Austria and Latin America. A major difficulty here is to distinguish the activities of Masonry as an organization from those of its members imbued with its spirit but acting as citizens of their respective countries. On practical issues there has usually been wide diversity of opinion among members, and the individual member is never bound by the majority opinion of his lodge. Moreover it has always been possible for certain lodges to advance causes not approved by the order as a whole. It is not always possible furthermore to distinguish legitimate from illegitimate lodges formed to advance factional causes by clandestine manoeuvres. It is therefore particularly difficult to reach any final conclusion regarding the highly controversial question of the role of Masonry in the French Revolution.

A few years after the fall of Robespierre the thesis was advanced that the revolution, including the Terror, was a part of a plot for world dominion fully formulated as early as 1785 by Masons and led by a mysterious group of adepts of the Bavarian Illuminati. This view gained ready and widespread acceptance and became one of the great historical myths of the last century. It rests mainly on the slender fact that the Illuminati, formed in 1776 by Weishaupt to combat Jesuit influences in Bavaria, had penetrated certain Paris lodges through the influence of Mirabeau and certain German emissaries. The actual influence of the Illuminati in France, however, seems to have been very slight. While popular for a brief period in Germany, enrolling many famous names, its number never exceeded a few thousand and its activities ceased, so far as authentic records go, after the final edict of dissolution in 1785.

The importance of Masonry for the revolution lies in another direction. After the formation of the Grand Orient in 1773 the order not only acquired great prestige through inclusion in its membership of a considerable portion of the socially élite but also became more militantly liberal, largely under the influence of the Neuf Soeurs lodge, which included the leading *encyclopédistes*, American sympathizers and kindred spirits. On the eve of the revolution there were over five hundred active lodges in France, be-

sides sixty-nine among the regiments. Its membership covered the whole range of opinion on public policies. It included, on the one hand, most of the promoters of the reform and liberal spirit, readers of Voltaire and Raynal, who deplored the evils inflicted on humanity by revealed religion and political autocracy; and, on the other, members of the privileged classes, nobility, venerables, deputies, magistrates and clergy (Martin, *La franc-maçonnerie française* . . . , p. 29). The order as such was neither atheistic nor antireligious; and there is no documentary evidence that the council of the order ever took any action to impose partisan political precepts on its members. While in January, 1789, it declared its adherence to the principle of representative government, it maintained loyalty to the king. Repeatedly asserting that liberty and equality were its basis, it seems, like the American Federalists, to have cherished a democracy only among the élite.

At the same time recent studies would seem to indicate that Masonry partly by concerted action of its lodges and partly through the activities of members imbued with its ideals played a leading role in the organized propaganda preceding and during the Estates General of 1789. More than one half of the deputies to that body were Masons and its committees were very largely dominated by them; the Club Breton, forerunner of the Jacobin Club, was composed largely of Masons. Careful documentary research points to Masonic influences in the preparation of the *cahiers*, the conduct of the elections, the financial support of reform propaganda, the organization of bureaux of correspondence, of the national guard and of patriotic societies to influence *petit bourgeois* and proletarian activity, and the penetration of administrative bureaux with reformism.

There is no evidence, however, that Masonry at any time shared the views later represented by the "republicans" of 1792; it sought reform without revolution. A large proportion of Masons subsequently became émigrés, while only eighteen lodges in all France remained to answer the call of the Grand Orient to renewed activity in 1797. In sum, French Masonry in 1789 was perhaps the chief rallying point of many currents of discontent, the center of organized propaganda for ideals which it did not create, which it alone could not have pushed to success but which might not have succeeded without its vigorous support. At the same time it was in fact less revolutionary than its precepts sounded and

was far from intending the violent cataclysm which its activities assisted in unleashing.

During the nineteenth century French Masonry under the Grand Orient became gradually more democratic and anticlerical. It played a very minor role in the revolutionary movements of 1830 and 1848, but with the establishment of the Third Republic it openly and vigorously promoted the secularization of education, the suppression of all state appropriations for religious agencies and the complete separation of church and state. To these ends the lodges have been centers of political and religious discussion; the Grand Orient had taken a planned part in elections and brought pressure to bear on members of parliament and other public officials, sometimes, as in the system of delation (*l'affaire des fiches*) exposed in 1904 by Villeneuve, in a conspiratory manner.

Masonic activities in Italy, Spain, Portugal, Latin America, Hungary and Russia have not been clarified by research. That Masonry was a factor of some importance in the Italian Risorgimento seems certain: Mazzini and Garibaldi were Masons; but its relation to Carbonarism seems to have been mainly that of psychological suggestion and cooperation rather than unified organic participation. Following his rapprochement with the papal authorities, Mussolini ruthlessly suppressed all Masonic activities throughout Italy. The experience of the order in Spain has been that of brief periods of growth followed by long periods of violent repression. While its enemies attribute to it every subversive movement in Latin countries, it seems doubtful whether it can claim such widespread influence. Its membership in these countries has been small and its political activities are little likely to succeed unless in harmony with powerful new forces in the national life.

In spite of its ideal of a world wide brotherhood, Masonry has often failed, when put to the test, to transcend the limitations of nationalism and sometimes even of racial and religious differences within a nation. Prussian and Scandinavian lodges persistently refused to admit Jews, not, they said, because of race prejudice but because the strong social affinities of Jews render them a danger to the non-sectarian character of the order. For somewhat similar reasons Negroes have not been admitted to American lodges. International solidarity has been impeded by patriotism and differences as to the religious tenet. During the World War the United Grand Lodge of England excluded all brethren of Ger-

man, Austrian, Hungarian or Turkish birth and continued this prohibition long after 1918. After the war French Masonry passed resolutions against the Versailles Treaty and for disarmament—moral, economic, financial and military—the entrance of Germany into the League of Nations, the evacuation of the Ruhr, the reduction of tariffs, the suppression of chauvinism and the teaching of the German language in French schools. Nevertheless, well intentioned efforts to restore affiliation between French and German Masonry failed because of disagreement over war guilt. In 1921 the International Masonic Association was formed at Geneva by representatives of the grand lodges of France, Belgium, Bulgaria, Holland, Italy, Portugal, Spain and Switzerland and groups from Austria and the United States. Within the English speaking world Masonry has moreover promoted solidarity throughout the British Empire and good will between the empire and the United States. These international aims are emphasized by certain groups within the order in all countries which conceive of the promotion of world peace and unity as one of the conscious missions of Freemasonry.

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See: FRATERNAL ORDERS; SECRET SOCIETIES; FRENCH REVOLUTION.

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MASPERO, GASTON CAMILLE CHARLES (1846-1916), French Egyptologist. Maspero was born in Paris of Italian parents; while a student he attracted the attention of French Egyptologists and was entrusted with the editing of Champollion's field notes. At the age of twenty-eight he was appointed to the chair of Egyptian philology and archaeology at the Collège de France. In 1880 he was sent to Egypt by the French government to organize an archaeological mission and in the following year he became director of the Egyptian Department of Antiquities. Whereas his predecessor, Mariette, had maintained a virtual monopoly of archaeological work, Maspero threw Egypt open to the excavation of responsible outside societies. He returned to France to resume his academic duties in 1886 and thirteen years later was recalled to Egypt. He began the definitive publication of the rich collections of the Cairo Museum, secured the passage of a comprehensive antiquities law and campaigned for provincial museums both to relieve the congestion in Cairo and to give the local collections a wider educational scope. He resigned in 1914 and at the time of his death was perpetual secretary of the Académie des Inscriptions et Belles-Lettres.

During a long period of literary activity Maspero made many monumental contributions to archaeology, philology, history, folklore and art, including textual studies as well as authoritative general works. His *Histoire ancienne des peuples de l'Orient* (Paris 1875, 11th ed. 1912), written when he was twenty-nine, served as the basis of his brilliant *Histoire ancienne des*

peuples de l'Orient classique (3 vols., Paris 1895-99; tr. by M. L. McClure as *History of Egypt, Chaldea, Syria, Babylonia and Assyria*, 3 vols., London 1894-1900), which was encyclopaedic in scope and gained a wide audience among educated laymen throughout the western world. The *Études égyptiennes* (2 vols., Paris 1879-90) deals with all periods and all phases of Egyptian history. Maspero transcribed and translated the *Inscriptions des pyramides de Saqqarah* (Paris 1894), perhaps his greatest work; it represents brilliant pioneering in a new and difficult field. His *Archéologie égyptienne* (Paris 1887, new ed. 1907; tr. from 6th ed. by A. S. Johns, London 1914) was of primary importance in popularizing information about Egypt. Among his other outstanding works are his collections of *Contes populaires de l'Égypte ancienne* (Paris 1882, 4th ed. 1911; tr. by A. S. Johns, London 1915) and of "Chansons populaires" (in Egypt, Service des Antiquités, *Annales*, vol. xiv, 1914, p. 97-290) as well as his volume on Egyptian art (*Essais sur l'art égyptien*, Paris 1912; tr. by E. Lee, London 1913). He was a frequent contributor to many scientific and literary periodicals, founder of the *Recueil des travaux relatifs à la philologie et à l'archéologie égyptiennes et assyriennes* and director of the *Bibliothèque égyptienne*, a collection of studies by French Egyptologists.

Although Maspero stands as the leading exponent of "the French school" of Egyptology, his international eminence owes much to a cosmopolitan flexibility. As an administrator in an oriental country he pursued his aims by adapting himself to local conditions rather than by attempting to force his office into a rigid occidental mold. The world wide appeal of his writing rests on a striking lucidity of style, universally comprehensible. Subsequent work may have modified many of his conclusions, but no man has had a firmer grasp of Egyptology in its entirety.

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MASS EXPULSION may be generally defined as the forced evacuation of a certain region by large numbers of people upon order of the governing authority. The order may offer no alter-

native or one which is obviously unacceptable to most of the people affected. Decrees which by altering the status of a group virtually compel their departure, even when emigration is definitely prohibited, as in the case of the 400,000 Protestants who fled from France after the revocation of the Edict of Nantes in 1685, have a similar effect. In practise moreover it is not alone the legally constituted government which issues and threatens to enforce expulsion orders; it was at the command of a band of white residents that a small Filipino farming colony left Florida in July, 1932. For purposes of analysis, however, it seems desirable to limit discussion to the type of mass expulsion defined.

With the exception of certain cases which involve political differences and thus constitute forms of exile (*q.v.*), such as the expulsion of the Ghibellines from Florence in 1266, or which arise from the dictates of national economic policy, such as the transfer to northern areas of thousands of Russian peasants by Soviet decree in January, 1933, mass expulsion has generally involved a group alien either religiously, racially or nationally. There is usually present an additional and immediate factor, however, which precipitates the expulsion by emphasizing the incompatibility of the alien group with the dominant culture. The variety of factors and combinations of factors which produce this result can best be gauged by an examination of typical historical instances.

In the earliest forms of mass expulsion, generally associated with the Assyrian system of imperial administration and to be distinguished from the custom whereby captives were driven off to slavery or sacrifice, groups which had been rendered tributary to Assyria were subsequently uprooted and transplanted to other parts of the empire, generally, however, only after they had rebelled against Assyrian domination. Under the earliest system they were replaced by Assyrians; but Tiglath-pileser III seems to have instituted the interchange of subject groups, replacing deportees by groups deported from other parts of the empire. The guiding principle was an attempt to break down the cultural separateness of the rebellious groups and to assimilate them all to one cultural level. For this purpose it was generally sufficient to remove only the rulers and other leaders as well as all artisans and men capable of bearing arms. The remainder of the population, mingled with deportees from other sections, would lose its separate character. Separation from the land with which they had always

associated not only their national consciousness but even their national god would prevent the deportees from developing into aggressive rebels; this end was further assured by the practise of scattering them among a number of villages. After a few generations they would become assimilated into the cosmopolitan Assyrian Empire. This is no doubt what happened to the ten tribes of Israel which were transported from Samaria by Sargon in 722 B.C. The Assyrian policy succeeded in maintaining order, but the cosmopolitan spirit it created made it relatively easy for outside conquerors—the Babylonians—to seize power in Assyria. The Babylonians followed the Assyrian policy, notably in the case of the captivity of the Jews; so also did the Persian and Byzantine emperors. The Greeks occasionally practised a system analogous to the earlier Assyrian.

Another form of transplantation within the same empire is that dictated by national economic policy rather than by the desire to eliminate internal strife. Thus the Russian emperor Yaroslav in 1031 moved large groups of Poles from conquered areas of northern Galicia to his sparsely settled lands in Russia. Similarly, the present Soviet government occasionally transfers certain groups in order to increase the efficiency of the national economic machine. As in their fundamental assumptions regarding the relative importance of national economy and individual rights, these transplantations by Soviet authorities are related in purpose to the mercantilistic requirement that individuals remain in a particular locality. The importance ascribed by mercantilistic England to an immobile working population—an importance emphasized by the problem of poor law administration—was a factor in the expulsion of the nomadic gypsies by Henry VIII.

The role of war in precipitating the expulsion of previously tolerated groups is perhaps best illustrated by the pathetic case of the Acadians, the subject of Longfellow's *Evangeline*. The refusal of the Acadians, who lived on former French territory, to assent to bear arms against France led the English to uproot them and to scatter them among the English colonies of North America. During the World War descendants of old German colonists in Russia, living in a wide band of territory along the frontier, were expropriated by the Russian government, ostensibly because their loyalty could not be depended upon. That this was merely a device to appease land hungry Russian peasants is

evident from the fact that the area covered by expropriation orders was subsequently extended until it included practically the entire empire and that these German descendants supplied over 250,000 soldiers for the Russian army. On the western front Germany, needing man power in industry and agriculture to replace those serving in the army, deported to its own territory unemployed workers in occupied Belgian territory.

The frequent and widespread expulsions of the Jews are traceable primarily to their religious, racial and national separatism. Despite these alien characteristics, the Jews were not only tolerated but accorded fairly broad privileges for long stretches of time in countries which subsequently expelled them. Among the Jews the practise of money lending, which in some cases amounted to a monopoly, led to their being hated and consequently oppressed, especially in England. On the other hand, the Jews were useful to the kings of England by virtue of the royal rights over usurers and their estates, so that for long the English rulers resisted the demands for expulsion put forward by the church and the people; by 1290, when they were finally expelled, the Jews had lost their wealth and with it their strategic position, largely as a result of massacre, confiscation, taxation and the prohibition by the act of 1275 of their money lending activities. In France the operation of the economic factor was even more important; French policy, while ostensibly motivated by religious antagonism to the Jews, was mainly concerned with exploiting them for public revenue. At times toleration and protection, with the payment of regular *tailles*, fines and stamp taxes, were most profitable; at others, as in 1182, 1306 and 1394, expulsion and confiscation of property and sums due them seemed the most statesmanlike procedures.

The expulsion of both the Jews and the Moriscos from Spain was primarily a result of the drive to secure national homogeneity in the Spanish state, which had finally succeeded in wresting the last bit of Spanish territory from the Moors. At a period when the relations between church and state were so close, religious uniformity was the dominant requirement for this national homogeneity. It is significant that the Jews were expelled only after the failure of attempts to convert them to Christianity. Similarly, the Moriscos were expelled in 1609 and 1610 only after forcible conversion to Catholicism had failed to produce religious conformity.

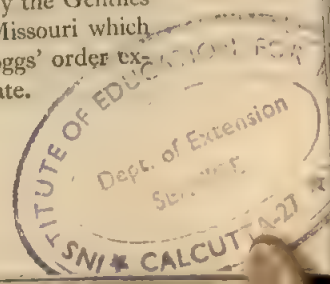
Continuous attempts to enforce such conformity in the latter case had resulted in over a century of internal strife and civil war and had produced a hostile alien element in the population—a potential ally for the enemy in case there should be an invasion of Spain by Moslem elements from northern Africa. The objections to the decree raised by the Spanish barons on the ground that it would deprive them of their most skilled agriculturists and artisans, and the attempt to keep 6 percent of the Moriscos in the country until they could train Spanish workers to replace them indicate that even at that time the economic disadvantages of the measure were apparent. The decline of Spain from world power rank is no doubt partly attributable to these forced migrations of Jews and Moors, who represented in a large measure the economic strength of the country.

Modern history furnishes a close analogy to the Spanish expulsions in the drive of the Turks to eliminate from their borders all alien elements—a drive which in a little over a decade removed over 2,000,000 members of alien minorities. But while the Spanish expulsions were largely attributable to the domination of the church over the secular authority, the wholesale expulsions from Turkey were due to a rising nationalism which was at the same time engaged in an attempt to secularize the state. The causes of the expulsion are therefore to be sought not in religious differences per se, but in the existence within the Turkish state of religious minorities organized as political entities under the *millet* system. These traditional political units could not quickly be absorbed into the new Turkish nationalism, and in a region troubled by resurgent nationalisms they represented danger zones to be eliminated as quickly as possible.

The unsettled Balkan situation with its complicated minorities problems has produced a variant of mass expulsion, namely, exchange of populations. General international practise has been to accord to individuals in ceded territory the right to choose their nationality within a certain time limit; if they elected to move so as to retain their former nationality, they were to retain the right to their property, movable and immovable. In 1913, however, following the First Balkan War, Turkey and Bulgaria provided for the reciprocal exchange of Bulgarian and Moslem populations within fifteen kilometers of the entire newly created common frontier. As most of the individuals involved had already emigrated, this provision served largely

to ratify a *fait accompli* and was intended merely to force the small remainder to follow suit. In 1914 the Turks, having expelled 150,000 Greeks from the coast of Asia Minor to Greece and having deported 50,000 more to the interior of Anatolia, induced the Greek government to accept these deportations and to supplement them by an exchange of Moslems from Macedonia against the Greek rural population of the Smyrna region. Turkey's entrance into the World War ended the operation of both these agreements. After the war Greece and Bulgaria signed a convention which recognized the right of national minorities to emigrate and which set up a mixed commission of representatives of the two countries to facilitate the exercise of that right. Greece's action early in 1923 in transferring some of its Bulgarian inhabitants to other sections of Greece for military reasons precipitated a Bulgarian exodus, which in turn resulted in an enforced Greek migration from Bulgaria; thus what set out to be a voluntary individual act became a forced migration. Frankly compulsory from its very inception was the Greco-Turk covenant in the Lausanne Treaty, which provided for the compulsory departure from Turkey (with the exception of Constantinople) of all Turkish nationals of the Greek Orthodox religion and of all Greek nationals of Moslem faith from Greece (except for Western Thrace). As far as the Greeks in Turkey were concerned, the convention was largely a ratification of a *fait accompli*; even so, almost 200,000 Greeks emigrated from Turkey under its terms. Greece expelled over 350,000 Moslems under the agreement, thus obtaining some lands upon which to resettle Greek refugees from Turkey, a process which was aided by the League of Nations through its representative, Fridtjof Nansen.

Other examples of religious groups expelled because of the effect of their religious views upon the proper functioning of the state might be mentioned. Sects like the Mennonites, Socinians and Dukhobors, which prohibit the taking of oaths, resort to civil courts, holding political office and, most important of all, service in the army, have frequently been subjected to persecution involving mass expulsion in many cases. Fear that the Mormons would replace frontier democracy based upon individual opinion by a theocracy directed by the elders of the Mormon church led to their persecution by the Gentiles and precipitated a civil war in Missouri which resulted in 1838 in Governor Boggs' order expelling the Mormons from the state.



If politically dangerous religious minorities have been persecuted and expelled, so also have the representatives of the dominant church when the latter has challenged the power of the secular authority. The Venetian controversy with the pope over the claims of the universal church to jurisdiction over the people of Venice was accompanied by the expulsion of the Jesuits from that state in 1606 and again in 1761, when they were also expelled from other states. The expulsions of Catholic priests and church dignitaries in Spain and Mexico in 1931 followed revolutions of an antireligious class nature.

The problem of protecting the deportees from murder, famine and disease has generally proved formidable. Massacre (*q.v.*), which has frequently served as a prelude, as in the case of the Jews and Moriscos, has also often been an accompanying feature of expulsion. With no government responsible for or strong enough to assert an interest in their protection, rarely provided with police escort even as far as the port of embarkation, the deportees have been at the mercy of the captains who transported them and of the people among whom they were landed. Inadequately provided with food, shelter and sanitation, the mortality rate among them has generally been very high. Of the half million Moriscos who were deported from Spain in 1609 and 1610, it has been estimated that only one fourth to one third survived the expulsion. A large proportion of the 7000 Acadians died of famine, disease or shipwreck; and the plight of the deported Armenians was even worse than that of the Acadians.

Even more meager, although less dramatically tragic in its consequences, has been the provision for protecting the property rights of the deportees. Where they have been permitted to convert their property into movable wealth, the inevitable effect of such a large scale offer of commodities for immediate sale has been to reduce their value almost to the vanishing point. Even when the right of sale was granted, it did not generally apply to real property. In many cases, particularly where the deportations took place under governments dominated by bullionist and mercantilist conceptions, the deportees could not take with them gold or silver or even, in some cases, precious stones. In the case of the Acadians the promise of transport facilities proved greater than the fulfilment, and their hastily gathered household goods were left to rot on the shores of the Bay of Fundy.

Where transplantation took place within the

boundaries of a single state, some attempt was generally made to provide land for the deportees. In Assyria, where practically all the land was the property of the monarch and was held by the cultivator at the monarch's will, this was relatively easy. It is even probable that the Jews during the Babylonian captivity obtained better soil than they had possessed in their homeland. In the first transfer of the Dukhobors in Russia in 1841 land was provided for them in Transcaucasia, but in the deportations of 1895 no such provision was made. The problem of property rights of deportees would obviously not be considered important in a country based, like Soviet Russia, upon the ideal of the abolition of private property.

The most elaborate provision for the protection of the property rights of uprooted peoples was made in the various Balkan compacts for the exchange of populations. These set up mixed commissions which were to liquidate the property left by the deportees and to provide funds for their resettlement. However, the commissions set up under the Turko-Bulgarian convention and the Greco-Turkish agreements of 1914 and 1923, on the last of which the Council of the League of Nations was represented, never carried out the contemplated appraisal and liquidation. Only the Greco-Bulgarian Mixed Commission ultimately made any substantial payments—partially in cash and the balance in bonds which have depreciated considerably. Thus even when two governments have cooperated to protect the property rights of the transplanted peoples, the result has been failure in most cases, apparently because of the atmosphere of group animosity and distrust which prevails at the time and which has led to the expulsion.

Any evaluation of mass expulsion from the standpoint of all those concerned must conclude that it is undesirable as an instrument of state policy. The effect upon the deracinated individuals and groups is obviously bad. As far as the expelling country is concerned, the effect has generally been to deprive it of an economically and culturally important section of the population—often economically the most advanced and aggressive, as in the case of the Jews and Moors in Spain and the Greeks and Armenians in Turkey. Uniformity is purchased at considerable economic and cultural cost in such cases. The countries to which the refugees migrate are confronted by the problem of providing for their immediate economic and sani-

tary needs and for their ultimate resettlement; the financial burden involved in such provision is extremely heavy, especially in the case of relatively poor states like Turkey and Greece. Mass expulsion appeals to the statesman as a form of surgical operation—the removal at one time of a chronic source of irritation. Under conditions in which group conflict and minority oppression have apparently become unavoidable, mass expulsion may appear the easiest and quickest solution; the remedy is therefore to be sought in the prevention of such conditions, the roots of which lie deep in the fundamental factors of national, racial and religious intolerance and persecution, which produce alike massacre, oppression of national and religious minorities and mass expulsion.

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See: PERSECUTION; INTOLERANCE; MINORITIES, NATIONAL; NATIONALISM; ASSIMILATION, SOCIAL; ALIEN; ANTISEMITISM; DIASPORA; EXILE; MASSACRE; VIOLENCE; CONQUEST; EMIGRATION; DEPORTATION AND EXPULSION OF ALIENS.

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MASS PRODUCTION. See LARGE SCALE PRODUCTION.

MASSACHUSETTS TRUSTS. Massachusetts, or business, trusts are unincorporated organizations for carrying on a business for profit under a written declaration of trust. The declaration creates a board of trustees to manage the enterprise for a group of cestuis que trust whose interest is represented by transferable certificates of participation. Such a trust is usually recognized as an entity capable of transacting business in the name of its choice; it survives the life of an individual cestui or trustee; and limited liability of the participants is frequently achieved. The result is a commercial organization closely akin to a corporation.

The business trust is a device peculiar to the common law system. Historically it is an offshoot of that great overgrown partnership, the English joint stock company. Legally it is a monument to the ingenuity of counsel who adapted the specialized Anglo-American law of trusts (see TRUSTS AND TRUSTEES) to secure corporate advantages without incorporation. It was first introduced in the United States in Massachusetts as a means of evading the requirement of a special charter (which was very rarely granted by the legislature) for the corporate holding of land; it subsequently appeared in other states in an ever widening variety of business projects.

The economic forces which led to the development of the business trust were similar to those which led to a concomitant growth of the corporation. But when incorporation ceased to be a special privilege, the business trust was at first completely overshadowed by the corporation as a form of business organization. Near the close of the nineteenth century, however, as governmental regulation of corporations became more and more onerous, the business trust was revived as a means of avoiding regulative laws. Attempts to use the trust form to protect the sugar and oil combinations from legislative and

common law prohibitions against monopoly were early nullified by the courts [*People v. North River Sugar Refining Co.*, 121 N. Y. 582 (1890); *State ex rel. Standard Oil Co.*, 49 Ohio 137 (1892)]. But in many other respects the draftsmen of Massachusetts trust indentures were at first successful in their aim.

Unlike a corporation, which theoretically at least derives its authority for doing business from the state, the business trust has been said to be a mere matter of contract. Freedom of contract will allow the promoters to define as they please the scope of the business, the powers of the trustees and the rights or lack of rights of the capital contributing cestuis. The Massachusetts trust thus avoided many of the corporate safeguards to protect stockholders, minority interests and creditors. By its use numerous activities closed to corporations were entered upon; management was effectively concentrated in the hands of a self-perpetuating inside financial group who acted as trustees; voting privileges and preemptive rights were successfully denied the residual shareholders so as to free the management from the danger of bothersome interference by minority or majority factions; expensive incorporation fees as well as some franchise and corporate stock taxes were obviated; the nuisance of filing annual reports with the state was avoided; and qualification to do business in foreign states was often unnecessary.

One of the most serious disadvantages of the trust lies in the risk that shareholders may be held liable as partners. This possibility appears to turn upon the extent of the potential control of the business allowed them by the trust agreement. If they are accorded no powers of initiating action or of amending the indenture or of removing or electing trustees, then the trustees have often been deemed to be transacting business as "pure" trustees rather than as "agents" of cestuis associated together as partners. But the courts of some states, such as Texas, have regarded the business trust as an ill concealed attempt to dodge general incorporation or limited partnership statutes and have declared that limited liability may be had only by compliance with such statutes. The whole question of whether partnership liability is a matter of contract or status is an open one in the great majority of states.

Trustees too may find that they are liable as individuals to a greater extent than they anticipated. For although they may and usually do contract that creditors shall look only to the trust

estate for satisfaction of their claims, both the trustees and the shareholders may be barred from asserting this defense because the creditor has not had proper notice of the limitation. And whether limited liability of trustees or shareholders against tort claims can ever be secured is still uncertain in most jurisdictions.

The business trust occupies a broad indefinite ground between the corporation and the joint stock company or partnership. The rights and duties of corporate stockholders and directors have been fairly well crystallized by decisions and statutes. Similar questions involving business trusts have been so infrequently litigated as to leave their outcome problematical. Where such questions have been before the courts, judges have not infrequently analogized the trust to a partnership when the trust interests contended it was like a corporation and likened it to a corporation when the trust interests claimed it was like a partnership or individual entrepreneur. Thus a Massachusetts trust has been held to be like a partnership when seeking entrance into the federal courts on grounds of diversity of citizenship and like a corporation when seeking to do business in a foreign state without qualifying in the manner prescribed for foreign corporations. Furthermore although the power to sue and be sued by third parties in the name of the trust is usually allowed, shareholders and trustees have been denied the privilege of settling claims *inter se* at law and have been left instead to all the difficulties of a partnership accounting in equity.

Despite the disadvantages of Massachusetts trusts they have been widely used since 1900. The Boston Personal Property Trust is perhaps the most notable example of the use of the Massachusetts trust to avoid laws denying corporations the right to hold real estate. The Associated Gas and Electric system and other utility companies hold stock in Massachusetts operating utilities through business trusts—presumably to get around the state law preventing the control of domestic utilities by foreign holding companies. Throughout the southwest the business trust has become the favorite organization of oil speculators engaged in wildcatting, apparently because of the speed and informality with which the trust may be set up and carried on. Building trusts are often used, especially in Chicago, to keep the control and interest of large real estate holdings in the hands of a single family. The Massachusetts trust has proved a convenient medium for patent pools where the

naming of a large bank as trustee is thought to promote confidence in equality of treatment among licensees. The great express companies formerly chose the trust form of organization in part because they believed it would enable them to avoid qualifying for the doing of business in foreign states. Large manufacturing groups like the Simmons Hardware Company and the Amoskeag Manufacturing Company operate under trust agreements in order to secure particular tax advantages and concentration of control in the hands of a self-perpetuating board of trustees. In England and of late in the United States the business trust has become increasingly popular in the investment trust (*q.v.*) field. The Massachusetts trust is likely to be most used as a means of still further divorcing financial management from residual ownership. Instead of frowning upon this separation, as in the case of voting trusts of corporate stock, courts have encouraged it by insisting that unless trust shareholders surrender all the usual prerogatives of management they will be subject to partnership liabilities.

Subsequent to 1910 all manner of extravagant claims were made as to the constitutional immunities enjoyed by the business trust from governmental regulation and taxation. However, Massachusetts in 1909 and several states since then have successfully required that all such declarations of trust be registered and annual reports filed. Blue sky laws have been almost universally interpreted as applicable to trust securities. The Supreme Court has sustained state laws compelling foreign business trusts to subject themselves to service and to qualify in the same manner as foreign corporations. The same court has held there is nothing unconstitutional about taxing them like corporations if only the legislature makes clear such intention.

Careless drafting of regulative statutes may hamper future effective control of business trusts. This has already been demonstrated in taxing laws which have not expressly included the business trust along with the corporation, joint stock company and other business associations. Governmental regulation of corporations can no longer be regarded as a price paid for the privilege of doing business in the corporate form; it is clearly a part of the movement for public control of business enterprise. The tendency increasingly to subject the business trust to regulation similar to that of the corporation has considerably reduced its usefulness as a substitute for the latter. Its importance as compared

with that of the corporation has tended to decline and it no longer threatens, as some of its advocates once supposed, to displace the corporation.

J. HOWARD MARSHALL, II

See: TRUSTS AND TRUSTEES; TRUSTS; CORPORATION; PARTNERSHIP; JOINT STOCK COMPANY; FOREIGN CORPORATIONS; INVESTMENT TRUST; VOTING TRUST.

Consult: Wrightington, Sidney R., *The Law of Unincorporated Associations and Business Trusts* (2nd ed. Boston 1923); Warren, Edward, *Corporate Advantages without Incorporation* (New York 1929); Dunn, William C., *Trusts for Business Purposes* (Chicago 1922); Sears, J. H., *Trust Estates as Business Companies* (2nd ed. Kansas City 1921); Thompson, Guy A., *Business Trusts as Substitutes for Business Corporations* (St. Louis 1920); Wilgus, H. L., "Corporation and Express Trusts as Business Organizations" in *Michigan Law Review*, vol. xiii (1914-15) 71-99, 205-38; Cook, William W., "The Mysterious Massachusetts Trusts" in *American Bar Association Journal*, vol. ix (1923) 763-68; Crotty, James A., "The Business Trust" in *Lawyer and Banker*, vol. xv (1922) 205-20; Comments on the Massachusetts Trust in *Yale Law Journal*, vol. xxxvii (1927-28) 1103-21; Hildebrand, I. P., "The Massachusetts Trust," and "Liability of Trustees, Property and Shareholders of a Massachusetts Trust" in *Texas Law Review*, vol. i (1922-23) 127-61, and vol. ii (1923-24) 139-82; Massachusetts, Tax Commissioner's Department, *Report of the Tax Commissioner on Voluntary Associations*, Legislature, House Document, no. 1646 (1912), and Special Commission to Investigate Voluntary Associations, *Report*, General Court, House Document, no. 1788 (1913); Magruder, Calvert, "The Position of Shareholders in Business Trusts" in *Columbia Law Review*, vol. xxiii (1923) 423-43; Aaron, H. J., "The Massachusetts Trust as Distinguished from Partnership" in *Illinois Law Review*, vol. xii (1917-18) 482-88; Rottschaefer, H., "Massachusetts Trust under Federal Tax Law" in *Columbia Law Review*, vol. xxv (1925) 305-15; Duxbury, L. S., "Business Trusts and Blue Sky Laws" in *Minnesota Law Review*, vol. viii (1923-24) 465-84; Massachusetts, Special Commission on Control and Conduct of Public Utilities, *Report*, General Court, House Document, no. 1200 (Boston 1930) sect. 9, appendixes C and N.

MASSACRE is the large scale slaughter of unarmed persons. Massacres may be planned acts of policy ordered by authority or more or less spontaneous mob action. In the former case a rational object can usually be discerned, in the latter blind passion may predominate. Fear usually plays a chief part as the motive, although the victims may be only the allies, kinsmen or protégés of the dreaded enemy. Commonly victims are regarded as contemptible and abominable. To what degree massacre involves pathological elements of fear, blood lust, sadism and even physical responses inconsistent with sane behavior in an ordered society is a question for

the psychologist and even for the physiologist. There are in general two main types of massacre. The one is large scale slaughter of unarmed persons as a demonstration of ruthless power to discourage opposition. This type of massacre shares the essential characteristics of atrocities in general. The second type is directed toward the literal extermination of a tribe, group, sect, nation or class.

Primitive tribes rarely pushed quarrels to such an extreme as massacre. Indiscriminate slaughter of the divine king's enemies seems to have been introduced by the theocratic empires of antiquity. Their invention of fighting in formation made it easy, their theology justified it, and it became the ordinary accompaniment of warfare and conquest. King Narmer's palette, probably the earliest of Egyptian historical records, shows that monarch butchering his suppliant foes with his own hands. Ancient monuments glory monotonously in massacre and gloat over the misery inflicted. The desolation of Israel is the boast of the stele of Merneptah (c. 1225 B.C.); it proved the majesty of the god and of his human representative, the king. Babylonia and Assyria had similar practises. The extermination of the adult male population was the normal process of conquest: to enslave or carry into captivity men as well as women and children undoubtedly marked an advance in humanity.

The Greek civil wars were of an exemplary brutality. When in 427 B.C. Mytilene revolted against the Delian League, at this time a thin disguise for the Athenian empire, the Assembly sentenced the entire population to death; the decree was partially executed and then rescinded. A less tribal and more universal morality, of which stoicism was the noblest expression, influenced public conduct in the mature centuries of Greco-Roman culture. Imperial Rome had her oft violated ideal of sparing the vanquished while crushing the defiant. Later centuries degenerate in this as in other respects, and the struggles of the Christian sects have been stained by frequent massacres.

In modern times (a phrase connoting widely different periods in various parts of the earth) mankind regards massacre as an abnormal and criminal incident which calls for explanation. Modern massacres may be classified according to the occasions leading to them. In contemporary international wars they are usually defended by commanders as reprisals for some alleged breach of the usages of war. The shoot-

ing of guerrillas or *francs-tireurs* (ununiformed irregulars) may be extended to unarmed civilians suspected of giving them shelter or aid. This was done by the Germans at Namur in 1914 and on a very large scale by the Japanese at Shanghai in 1932. Alleged abuses of the white flag led to some shooting of prisoners by the British in the Boer War. Occasionally troops who have suffered heavy casualties will spontaneously take revenge on prisoners: machine gunners were often massacred in this way during the World War. Finally, a force which cannot transport or feed its prisoners will sometimes shoot them; this was occasionally done by both sides during the submarine campaign of the World War.

Similar in nature to these military reprisals is the large class of cases in which for purposes of repression a police or military force needlessly slaughters a harmless crowd engaged in some form of protest against authority. Fear is the real prompter: one must "make an example" of a given crowd in order to intimidate the whole of a potentially disloyal population. The attitude of upper classes, whether feudal or capitalistic, toward the working mass at times approaches this. The recent annals of the most civilized nations are not devoid of such excesses: one may take as outstanding instances the affair in Boston, Massachusetts, in 1770; the riding down by cavalry of the orderly reform demonstration at Peterloo near Manchester, England, in 1819; the shooting outside the Winter Palace in St. Petersburg in 1905 of the procession of workers which followed Father Gapon to lay a petition before the czar; the massacre of an Indian crowd by General Dyer at Amritsar.

Graver cases of massacre, at bottom attempts to exterminate an entire element of population be it race, class or sect, are most frequent where a small body of white men are holding down a subject population which they are pleased to consider inferior. Such massacres are apt to occur in the course of imperial expansion when a native race, which cannot easily be tamed or assimilated, has from the settlers' standpoint no economic utility, because it can be neither enslaved nor hired. Often it claims for hunting vast stretches of country which the settlers wish to use for other purposes. To justify massacre it is then only necessary to accuse the natives of low, immoral or cruel conduct: because their customs are not understood they are often said to be "treacherous"; when their culture is in fact a lowly one, their very humanity is denied.

Here again fear may be the chief cause of massacre, especially where the settlers are outnumbered by a gallant and mobile enemy who uses the tactics of surprise, as was the case in North America. The most complete instance of the continuous massacre of a lowly race economically useless to the invaders is the extermination of the entire native population of Tasmania by the British settlers in a period of a few decades. Another type of imperialist massacre frequently accompanies the exploitation of a tropical native population by means of a tribute in kind or a money impost designed to drive it to work for hire on white men's plantations. The Belgian Congo under King Leopold II was a leading instance.

The victim of course retaliates when he can. The English tried to get rid of Danish invaders by murdering them in their beds on a pre-arranged signal. The Sicilian Vespers of 1282 were a case of this kind: the Greek and Saracen population, cruelly oppressed by Charles of Anjou, who imported armed French adventurers, utilized a chance quarrel over a woman to start a massacre of all strangers. The massacres conducted by the sepoys in the Indian Mutiny, on the inspiration of their royal native leaders (especially Nana Sahib), were of this type; the sepoys imagined that they could rid themselves of the conquest by slaughtering the English in their midst. The Boxer rising in China, a nationalistic rising of the same type, led to some sporadic killing of isolated Europeans.

Class wars notoriously lead to massacre. An upper class cannot wish or hope to exterminate the class that serves it, but it may intimidate it by thinning its numbers. A revolted lower class may try to exterminate its oppressors. The *Jacquerie*, a rising of French peasants in 1358, ended with a massacre of the insurgents unparalleled in horror. The peasant risings in Russia in 1905 and 1918 aimed at dividing the landlords' property: the more unpopular nobles were butchered save where they had fled to the towns.

Underlying the massacres of aristocrats and priests during the French revolutionary Terror was an idea of exterminating a hated and dangerous class. Such wholesale brutality could be caused only by acute fear; and this the French nation (or its bourgeoisie) not unreasonably felt when it saw all the monarchs of Europe leagued against it and suspected, sometimes with justice, that the aristocrats in its midst were conspiring

with the foreign enemy. Usually, however, some rapid form of irregular trial preceded the mass killings of the Terror. Some episodes, such as Carrier's massacres without trial at Nantes, especially the *noyades*, suggest insanity. Carrier, who had a record of moderation, seems to have been driven literally mad by the cruelties of the Royalists in the Vendée. The terror in the Russian Revolution ran on closely parallel lines and proceeded rather by numerous and continuous executions than by massacres in the proper sense of the word. The White armies systematically butchered their Communist prisoners, as did also the French bourgeoisie the communards in 1871. The present Chinese civil war, emphatically a class struggle between revolted peasants under Communist leadership and the armies of the Nanking government, has involved massacres on an incredible scale.

Finally, the elements of the population to be exterminated may differ from the butchers in creed. In such cases one must ask whether religious fanaticism is a sufficient explanation of the massacre. Invariably some other motive is present, often economic, often the determination of a challenged authority to assert its power. The motive of Pope Innocent III in launching a crusade against the Albigenses at the end of the twelfth century was certainly not fanaticism. The church was a system of authority challenged by a heresy which spreading rapidly from eastern to western Europe might have anticipated the consequences of the Protestant Reformation had it not been ruthlessly and forcibly crushed. The general of the church, Simon de Montfort, won a rich province and his soldiery plundered the cities, whose inhabitants they massacred as enemies of God addicted to incest and sodomy. When once they wished to stop, on the ground that some good Catholics might perish in the general slaughter, the papal legate answered them "Kill! God will know His own."

No more does fanaticism explain the salient massacres of the Reformation period. The slaughter of St. Bartholomew in 1572 was an act of calculated statecraft devised by Catherine de' Medici, a product of an Italian school of policy which believed only in the self-interest of princes. The king himself gave the first signal for the massacre. The fury of the Parisian mob subsiding after a long and cruel civil war was deliberately mobilized. For this massacre, which may have accounted for fifty thousand lives, the court won the congratulations of other Catholic powers; the Sorbonne defended the achievement

and Pope Gregory XIII celebrated it by striking a medal. In such massacres as that of Catholics by Cromwell in Ireland the motive, apart from reprisal and the assertion of secular authority against rebels, was manifestly economic: the butchers won lands. The part that religion played in all these cases after another motive had come into action was to remove the victims from the range of scruple and sympathy. They were God's enemies, despisers of the holy sacraments or else idolaters.

The massacres of Christians by Mohammedans in Turkey, which played so great a part in international politics during the nineteenth century, raise the same difficulties of interpretation. Abdul-Hamid, whose personal character dominated Turkish policy for a generation, was a gloomy, fear ridden fanatic, who believed intensely in his religion and in himself as its caliph. But then as later during the World War the prime motive resembled that of the French bourgeoisie during the Terror: the Turks saw the Armenians as domestic allies of Christian empires (especially Russia) seeking to destroy the Ottoman Empire. The mob disliked this race of traders, to whom it always owed money; infidels were fair game for indebted believers. The final "liquidation" of the Armenian race in Turkey was organized by the freethinking Young Turks for purely political reasons.

Pogroms against Jews have often started with apparent spontaneity, especially when the legend of ritual murder was abroad. The mob had, however, generally an economic motive—to extinguish a debt with the usurer. Even when it believed itself to be avenging the crucifixion, the houses of God's enemies were worth looting. The more serious pogroms of modern times, those in Russia, for example, were organized from above on the basis of popular hatred. Fearing genuine revolutionary movements of workers or peasants, conservative classes or governments try to turn passions against the Jews. Von Plehve, minister of the interior, organized an appalling series of massacres of Russian Jewry beginning in Kishinev in 1903. During the revolutionary civil war the White general Denikin and the "Green" bandit armies fighting in the same region employed pogroms on an even greater scale as a counter-revolutionary safety valve.

If graver massacres always involve the connivance if not the participation of a government, the only adequate measure of prevention would be removal of guilty governments. In the ab-

sence of an international authority of sufficient prestige and strength such action is difficult, dangerous or impossible. The Concert of Europe, because the motives of its component powers were manifestly imperialistic, on the whole aggravated the lot of the Christians of Turkey. A boycott if proposed without preliminary inquiry and without an authoritative organ to impose constructive remedies is open to similar objections. A massacre is a symptom rather than a specific evil. It means an aggravation of a habitual system of imperialist oppression, or it is evidence of a fundamental conflict between two classes or races. The real problem is not so much that of checking massacre as of dealing with the conditions under which governments or mobs resort to it.

H. N. BRAILSFORD

See: ATROCITIES; VIOLENCE; MOB; WARFARE; GUERRILLA WARFARE; REVOLUTION AND COUNTER-REVOLUTION; RACE CONFLICT; INTOLERANCE; ANTISEMITISM; BLOOD ACCUSATION; MASS EXPULSION.

Consult: Edwards, Lyford P., *The Natural History of Revolution* (Chicago 1927) ch. viii; Davie, M. R., *The Evolution of War: a Study of Its Role in Early Societies*, Yale Publications in Economics, Social Science and Government, vol. i (New Haven 1929); Allard, Paul, *Histoire des persécutions pendant les deux premiers siècles* (3rd ed. Paris 1903); Luzzatti, Luigi, *Dio nella libertà* (Bologna 1926), tr. by A. Arbib-Costa (New York 1930); Acton, J. E. E. D., *The History of Freedom and Other Essays* (London 1907) chs. ii, iv-v; Graetz, Heinrich, *Geschichte der Juden von den ältesten Zeiten bis auf die Gegenwart*, 11 vols. (2nd-5th ed. Leipzig 1890-1909), tr. by B. Löwy, 6 vols. (Philadelphia 1891-98) vol. i, ch. xxii, vol. ii, chs. ix, xi, vol. iii, chs. x, xii-xiii, xvii, vol. iv, and vol. v, ch. i; Warner, H. J., *The Albigenian Heresy*, 2 vols. (London 1922-28) vol. ii, pt. i; Butler, A. J., "The Wars of Religion in France" in *Cambridge Modern History*, vol. iii (London 1905) ch. i; Macleod, W. C., *The American Indian Frontier* (London 1928); Walter, Gérard, *Les massacres de septembre* (Paris 1932); Mathiez, Albert, *La réaction thermidorienne* (Paris 1929) ch. ix; Martin, Gaston, *Carrier et sa mission à Nantes* (Paris 1924); Mason, Edward S., *The Paris Commune; an Episode in the History of the Socialist Movement* (New York 1930); Horniman, B. G., *Amritsar and Our Duty to India* (London 1920); Steiger, G. N., *China and the Occident; the Origin and Development of the Boxer Movement* (New Haven 1927) chs. x-xi; Toynbee, A. J., *Armenian Atrocities, the Murder of a Nation* (London 1915); *Die Judenpogrome in Russland*, 2 vols. (Cologne 1910); Gensel, N., "Die Pogromen in Ukraine in die Yoren, 1918-1921" (in Yiddish), in *Yiddisher-vissenschaflicher Institut, Ekonomish-statistishe Sektsie, Schriften für ekonomi un statistik*, vol. i (1928) 106-13; Janz, Oszkar, *Magyariens Schuld Ungarns Sühne; Revolution und Gegenrevolution in Ungarn* (Munich 1923), tr. by E. W. Dickes as *Revolution and Counter-revolution in Hungary* (London 1924).

MASSES. The term masses, an elastic epithet devoid of any precise scientific content, is more likely to reveal the point of view of the person using it than to clarify the phenomena in question. In spite of recent moves, notably among the German critics of Le Bon, in the direction of clarifying terminology, the older metaphorical connotations persist. Among unrepentant aristocrats, intellectual as well as political and social, the term is interchangeable with *hoi polloi*, rabble, canaille, the great unwashed; prefaced by a patronizing adjective it may become the "suffering masses" of the humanitarian or the "eager masses" of the educator; to the political leader it denotes those whose approval and backing he needs only at election time and to the colonially minded western European is most apt to suggest the denizens of unindustrialized, that is, unenlightened, areas east of Suez and south of the equator—or beyond the Vistula. Based chiefly on external criteria, it is an essentially abstract concept and takes on color only when set against the articulate, politically or economically organized, minority operating in a particular institutional context.

In most cases in the past this organized minority was confined to a comparatively thin layer of the population which, in so far as it felt called upon to rationalize its prerogatives, professed to conduct public affairs in the interests of the unclassified residue. There have been few tyrants or oligarchs who have not felt constrained at times to divert and cajole their murmuring legions and tribute payers; and as the ambitions of intermediate groups impelled these groups upward to demand a separately classified status and an exclusive body of privileges, they were not long unmindful of the tactical advantages to be obtained by presenting their own immediate claims as the echo of a myriad voiced mass will.

During the course of these persistently recurring clashes between monarchical, aristocratic, agrarian and bourgeois groups there was gradually distilled a rhetoric from which emerged such initially volatile concepts as the people, the folk, the populace, the masses, liberties of the people and popular sovereignty. Although in the main a by-product of successive group thrusts to power, this incidental rhetoric came in time, especially in the ideological skirmishings among the more objective and systematically minded apologists in prerevolutionary England and France, to acquire an independent

principle of growth which served to perpetuate it beyond the group dictated compromises of the revolutions themselves into the era of bourgeois consolidation.

If in the period before the various bourgeois revolutions "masses" may be used, with some approximation of exactness, as an omnibus term to designate the heterogeneous elements excluded from the privileges and perquisites of the entrenched hierarchy or, less, its precise implications in the later antihierarchy, professedly egalitarian, social order do not lend themselves to such summary characterization. Once the principle of popular representation had been carried to its ultimate conclusion the older distinction disappeared, at least formally, between active and passive participant in government. Thus from a purely political point of view it might logically be maintained that the term masses, in so far as it has any meaning, comprises the millions who do not hold office, and that from a legal point of view the abolition of older discriminations has transformed the masses into the citizenry.

The explanation for the rapid spread of the concept in a society emphasizing equality is to be sought therefore in the emergence of a hitherto unclassified estate with a new ideology, which has sought to invalidate the abstract political and legal formulae of earlier champions of the excluded orders. In so doing the proletarian ideologists have succeeded in provoking general speculation regarding their hypothesis that the older concepts of equality acquire vitality only when protected by economic equality, while the disillusioning realities disclosed in the subsequent working out of the representative principle and in democratic legal procedure have raised still further doubts as to whether the informal privileges accruing from private wealth have not gone far toward counteracting the abolition of the more traditional distinctions between privileged fraction and unprivileged remainder. In striving for its predecessors to clothe its rationale and program in universal terms, the new fourth estate postulated a set of economic and social laws, which in working themselves out would gradually cast off or transform all bourgeois and other non-proletarian elements and generate ultimately a situation in which society and masses would be indistinguishable.

In the meantime, however, the necessity of prodding these slow working laws and of indoctrinating the more articulate and better organ-

ized layers of the industrial workers with a sense of their historic mission has tended, in turning emphasis from the ultimate to the immediate, to enrich the ideology and rhetoric of the dynamic proletarian minority in the urban centers. By practical implication therefore, if not by definition, the proletariat is distinguishable from the masses both in respect to its coherent pursuit of a rationally planned program and in its transmission from generation to generation of a functioning institutional technique (see PROLETARIAT). Although the revolutionary proletariat like the revolutionary bourgeoisie of an earlier period has not been unmindful of the rallying power of mass exhortations, mass appeals and mass symbolism, it has not been tempted in the main to confuse its clear cut working hypotheses by adjusting them to the spasmodic and unexpectedly complex realignments and reclassifications which have taken place within the other aggrieved elements of the population since the bourgeois revolutions.

Nor can the varied attempts to undermine the presuppositions of the proletarian ideologists be said to have contributed materially to rendering the concept of the masses more precise. In countries like the United States, where until recently the rhetoric of political and legal egalitarianism has been bolstered by a generally diffused rentier outlook, the hallowed tradition of "we, the people" has left little room for the more invidious epithet. Similarly, although for different reasons, the British tradition of parliamentarism was able, with minor renovations in the form of concessions to newer democratic pressures, to drain off the more threatening upwellings of mass consciousness provoked by the miseries attendant upon the industrial revolution. France, far more deeply infected with the Jacobin-utopian socialist tradition, was accordingly forced to more systematic counterformulations. When it became apparent that the tonic of Michelet's hymns to the undying spirit of the French people was beginning to lose its efficacy, a more enduring substitute was found in the carefully elaborated doctrine of social solidarity, which in postulating a harmonious interworking between the various coordinate elements of the population sought with some success to eliminate the invidious distinctions inherent in such phrases as classes and masses.

The theory of a people, one and indivisible, united in peace and united in war, was a prerequisite of nationalism not only in France but

in the other continental countries which were being drawn into an increasingly tense system of alliances and counteralliances. To German ears especially the mystically tinged conception of a creative *Volksseele*, first outlined by Vico and subsequently enriched by the German romantics and their nationalist disciples in France and Italy, provided not only an escape from the jagged realities of a hierarchically ordered society but an effective conscripting slogan. With the post-war Fascist reaction against democratic and parliamentary institutions, the doctrine of a massless people, mystically bound together in the pursuit of a common ideal, has reappeared in intensified and only slightly modified form.

This mystical glossing over of economic realities, which Marx so repeatedly criticized, has also and in a more direct way colored the conception of the masses, as advanced for example, by Bakunin and the *narodniki* in Russia. Indifferent on the whole to the changes wrought by industrialism and urbanization these leaders sought the revolutionary energy exacted by their program among the agrarian masses. Although in their preoccupation with the land and its essentially irrational cultivators they approached much more closely than did the nationalists the essential spirit of the *Volksseele* formulae, their faith in the agrarian masses as a potentially revolutionary force contradicted the primary presupposition of the romantic traditionalists. The attempts of Sorel and his followers to inoculate the industrial and urban proletariat with this irrational mass *élan*, of which like Bakunin they felt the lack in the equations of Marx, have merely served, by reason of their comparatively limited influence, to accentuate once again the implicit divergence between orthodox proletarianism and the cult of blind power as residing in the spontaneous masses. The eventual outcome of the dynamic coalescence of these two strains in the carrying through and consolidation of the Bolshevik revolution remains to be determined, as do in a different sense the relative contributions of the organized third estate and the eruptive neo-Jacquerie and sansculottes to the French Revolution.

In striking contrast to the romantics and the *narodniki*, modern psychologists, concentrated in urban centers and a bit unnerved by memories of the recurring episodes of barricade and street fighting in nineteenth century European capitals, have berated the irrational behavior

of the masses or, more accurately, of the crowds that congregate in cities. Shifting the sphere of gravity from the fields to the street corners, they have expatiated at length upon the irrational attributes of social psychology which the romantics took for granted and extolled. There has arisen therefore in modern scholarly terminology, especially in the German use of the word *Masse*, a somewhat confusing tendency to employ "crowd" and "masses" interchangeably. It is only recently, after a generation or more of Le Bon and his disciples, that the attempt has been made, notably among the German sociologists, to deal with the much broader problem of the interplay between the rational and irrational elements comprising the different layers of the population—rural as well as urban, scattered as well as congregated, latent as well as aroused—especially in so far as this interplay determines the rhythm of revolution, compromise and counter-revolution.

The vagueness and changeability, in point of social content, of the term masses add to its attractiveness as a rallying cry in the battles of words accompanying all contests for power. Both the officeholders and the contenders feel free to interpret the "mind of the masses" and to speculate and to make claims as to the possible course which this essentially unknown quantity in the social-dynamic equation is likely to pursue. The potency of the argument, from whichever side it may be advanced, is enhanced by the unwillingness of either side to submit the case to an actual test. The "revolt of the masses" is not a venture willingly entered upon even by those who stake their hopes on a radical downward revision and reconstruction of the social order or the political state. Barring the cases where the very lowest strata of constituted society are involved and where basic social revolution is the objective, an open provocation of the masses to direct action is generally deemed a dangerous and inadvisable expedient. Even in the case of a fundamental social revolutionary movement, as was the Bolshevik revolution in its preparatory stage, the party instrumental in shaping the movement preferred to keep the masses under check, although in readiness for action. It is not inconceivable that in the negotiations which, according to the Biblical account, Moses carried on with the king of Egypt in the name of the God of the Israelites and on behalf of the people the threat of God's visitation upon the Egyptians was but a symbolic presentation of the danger of bringing

the patience of the Israelite masses to the breaking point. But Pharaoh was no more impressed by Moses' claim that he had it in his power to arouse the masses to the point of forsaking their fleshpots than was Judge Gary in 1919 by the threat of William Z. Foster and Samuel Gompers to call out the hundreds of thousands of employees of the United States Steel Corporation. And if the Biblical account is to be relied on, Moses as leader had no easy task in keeping the once aroused masses in check; for, according to the record, God's appointed leader, despite the formal ban on murder, did not secure order and law until his lieutenants had laid low three thousand men, or approximately 2 percent of the masses.

The experience of all time, from the semi-legendary situations to those accurately recorded, shows that there has been little material alteration through the course of history as regards the essential practises of leaders and authorities in dealing with the masses; nor have there been vital changes in the techniques of summoning the masses to action or of preventing them from assertively taking over the control of events. The "masses" formula may be said to be employed in three major ways: when it is advanced by the officeholders, when it is invoked by aspirants to office and when it is asserted by the masses themselves.

The attitude of those in power toward the masses and the part the masses ought to play in the scheme of things does not appear to have deviated greatly since the early stages of historic development. Whether the officeholder be an Assyrian despot, a Roman emperor, a French king, a Russian czar, a president of the United States, a German Social Democrat in the office of the Reich presidency or a communist elevated to a high political power by a proletarian class dictatorship, his procedure, if not necessarily his aims, in dealing with the problem of the masses is dictated by the exigencies of power holding and of continuance in office. Minor deviations, it is true, manifest themselves in particular cases, while procedure as well as aims may vary in proportion to the proximity of the organs of authority to the masses. Thus an authority established by an overturn to which the masses were a party would be likely to differ substantially in behavior from the more traditional officeholder. Conventional procedure and policy would also tend to be discarded in the case of the governing group established in a classless social order, where

authority ceases to be political and becomes entirely functional and where politics as the means by which large numbers of people are moved to activity or prompted to do their share of socially important work tends to become gradually atrophied. Under such a social arrangement the significance of the masses as an entity set off against individuals and classes is likely to disappear. The social order now rising in the Union of Soviet Socialist Republics is rich in potentialities; provided future developments continue to unfold in accordance with the presuppositions and promises of the earlier revolutionary leaders, there may gradually be evolved a basically different attitude on the part of the officeholders toward the masses. Officeholding motivated by the drive for self-preservation and the tendency toward expansion of power is essentially a matter of keeping the categories of persons, presumed to constitute the masses, in a state of suspended mobility, immune to the solicitations of the opposition and yet potentially disposed to rally to the banner of the authority should the latter actually be threatened by the probability of an overt act on the part of the opponents of the regime.

If the strategy employed toward achieving the first objective is generally of an economic nature, that used for the realization of the second aim tends to be primarily psychological. If the masses are protected against hunger and cold, their susceptibility to the inducements of the opposition party will be negligible; but the officeholders cannot count upon active support from the masses unless the latter trust explicitly either in the righteousness or in the invincibility of the institutional status quo. Appreciable economic concessions are sometimes made at the expense of the class in whose interests the governing group operates. These are made either in direct response to pressure coming from the masses or as a countermove to the opposition's appeal to the masses.

The processes whereby the organs of authority strengthen their hold on the minds of the people are necessarily preventive: they seek to forestall pressure. The methods vary over a wide range from intimidation to cajolery and bribery. The priestly type of officeholder refers to the ungodliness of insubordination and the virtue of following the lead. The demagogic type of political officeholder seeks to inculcate in the popular mind the illusion of virtual participation and vicarious glory in the func-

tioning authority. The oppression psychosis may be cultivated for the purpose of cementing a vertical solidarity. Language and religion are used effectively to create unity of outlook and loyalty. The announcement that the state is in danger is another rallying cry for peace time to which the masses will respond; and the effectiveness of the appeal is emotionally intensified by the employment of the paraphernalia of national colors, parades, pompous services and the hysterical summoning up of the horrors which would ensue should the opposition gain a foothold.

While the strategy employed by constituted authority to prevent shifts of the mass mind toward the opposition is nearly always the same, there is a wide variety of rhetoric and forms of appeal. The divine right of kings has ceased to wield the force it once held over the popular mind, but the myth of superiority vested in "gentlemen," in people of "better" stock, still holds sway in democracies as well as in oligarchies. A good illustration of the point is supplied by the recent appeal of the German Fascist governmental heads to turn the masses from the alleged "madness" of the democrats who question the Hitlerite claim that "it was ever the man and not democracy that created values in centuries gone by when democracy destroyed and annihilated the value of individual effort." The fiction of an inherent superiority of the "better" families, from which the officeholders generally come and with whose scions they generally surround themselves, is successfully maintained; in part, as Huxley points out, it is due to a popular misunderstanding of the doctrine of survival of the fittest: "Fittest has the connotation of best and about best there hangs a moral flavor." Such notions as "hundred percentism," "Nordic superiority," "manifest destiny," "cultural superiority," the "white man's burden" and the Christian "duty" of carrying civilization to the four corners of the world are among the more familiar defense complexes with which officeholders seek to neutralize the various types of anti-authoritarianism to which the masses are exposed. The hold thus perpetuated by the officeholders on the mass mind would be unbreakable were it not for the counteracting influences of the contenders for power or aspirants for office, for these constitute a force which cannot be checkmated by bribe or by counterpropaganda. The material basis of power, its accompanying corruption and wastes, work counter to perpetuity of tenure;

power simultaneously tends to become progressively costly and obsolescent. Perhaps, if it were possible for officeholders to remain young, efficient and honest or but reasonably corrupt, they might claim the discovery of the secret of immutability—but such things do not happen.

The adaptation of the masses argument by the spokesmen of a rising power, that is, one aiming to achieve not merely a coup d'état but an actual transfer of power from one social class to another, differs of necessity from the officeholders' course, since it aims at a diametrically opposed objective. But the mechanics or the technique by which the reactions of the masses are brought into play are generically the same. If degrees of sincerity and mannerisms are disregarded, a considerable parallelism of procedure is discernible.

The efforts of the office seekers to identify themselves with the masses are in reality but attempts to induce the masses to merge their interests with those of the aspirants to power. The bourgeois and merchant class promoters of the French Revolution spoke of themselves and of the masses of the underlying population as one and the same "third estate." During the years when they were preparing the Bolshevik revolution the proletarian leaders advanced the view that the class conscious workers were the vanguard and spokesmen of the landless peasantry and undifferentiated city masses. Only after the revolution was firmly established were the hereditary wageworkers, and especially those who came closest to the revolutionary movement, distinguished as the preferred class under the dictatorship of workers and peasants. Efforts to create a conscious harmony, or rather an identity of interests, between the rising group and the masses are accompanied by an intensive intellectual drive and the elaboration of a theoretical foundation for the illusion of identity. If and when the new power is established, legislative efforts are made to fix the identity in terms of law. But sooner or later the illusion passes. The "glorious revolution" of 1688 in England established parliamentarism, but only a thin layer of the English people benefited appreciably by the great reform. The later stages of the American revolutionary movement witnessed a subtle reaction against the egalitarian principles of the Declaration of Independence and the inauguration of a constitution which in many respects embodied the fears of the more privileged groups in the presence of the

masses who had identified their material hopes with the leaders, the generals and the orators of the revolution. The French Revolution was much slower than either the English or the American revolutions in forcing a divorce of the erstwhile associates, the leaders and the masses whose eagerness to rebel exceeded in intensity their sense of socio-economic discrimination. The French Declaration of the Rights of Man outlived the honeymoon days of the revolution, but the revolutionary groups constituted no monolithic entity and could not withstand the impact of evolving economic differentiations. With every consecutive step in the revolution a clear, far reaching and widely ramified, although not generally and immediately realized, cleavage of interests was making itself felt. There was no identity of interests, either economic or political, between the bourgeois bureaucrats in the service of the old order, the financiers who had heavy investments in the nobility and opposed the abolition of the monarchy, the wholesale traders and not infrequently monopolist controllers of food and other merchandise supplies, the vast numbers of the notoriously reactionary hired servants, on the one side; and the poor artisans, the peasantry, the emergent industrial workers, the semiproletarian intellectualdom, on the other. The course of the revolution in its successive steps, through the Estates General, the Constituent Assembly, the Convention, the Thermidorian reaction, the rise of Napoleon Bonaparte, was a process of differentiation or decomposition of the masses into contending, conflicting, civil war waging groups.

While the leaders of a new drive for power endeavor, on the one hand, to induce the masses to identify themselves with the major interests of the group for which they speak, they seek on the other to frighten the officeholders into making ever more significant concessions to the contenders for power and their class. How far they will go in invoking the threat of mass violence in negotiating the bargain which they seek to attain depends upon the socio-economic base from which the opposition operates. They may point to the possibility of a "revolt of the masses" as something which both the officeholders and the aspirants likewise dread; they may, on the other hand, identify their group with the masses and use the threat with no attempt to separate the group from the "mob." A reformist opposition will refer to a possible revolt from below as something to be feared,

while the leadership of an out and out revolutionary movement will adopt the second approach. The threat of violence is not infrequently the crucial point in the development of the situation; it tests the relative strength of the opposition and of the authority. The latter will be likely to ignore the threat if it considers its own hold upon the masses certain, whether because of the moral or intellectual weight of its own claims to authority or because of the force it can place in the field to check an advance, or because of both. Or the government will be alarmed, will attempt to silence the opposition, to cajole the masses, constantly change its course and considerably weaken its position in the process. As a factor in hastening the disintegration of the power of the office-holders the strength of the opposition is but of secondary significance as compared to the weakness of the authority itself. The masses are likely to perceive the trend of the contest and gravitate toward the stronger side.

The masses argument in the contest for social power implies a passive state of the masses. At times, however, the masses themselves rise to action. They always do in the climactic moments of a genuine revolution, one which strikes out for a real, not a perfunctory or a purely personal, transfer of power. But the masses are no less likely to be involved to the extent of direct and active participation in mass upheavals, like strikes or local and minor commotions prompted by motives of religion or race. In all such cases the pent up mass energy is likely to break out under the stimulus of a clearly defined, more often than not personalized, and easily attainable goal. The spark which ignites the deposits of social mass energy may be of no special direct significance or even relevancy to the cause of the movement. The stupidity of the officer in charge of the Bastille, the hysteria of the czar in ordering the guards to fire upon the 300,000 unarmed petitioners before the Winter Palace on January 9, 1905, an unverified rumor, almost any untoward incident, may transform the masses from a state of passive, if intensely nervous, suspension to one of aggressive activism. But the distinction between masses in a revolutionary upsurge and a mob, which is but an ordinary crowd in action, appears in connection with leadership and objective. A crowd in action needs no leadership. A ringleader and the momentary excitement of the immediate situation may furnish the necessary release. The storming of the

Bastille or the Boston Tea Party might have remained single, isolated and in no way permanently significant incidents had each case not been preceded by a long series of events and cumulative efforts directed toward a highly rationalized objective. It is the preparatory work of the driving force in the contest for power which makes it possible, and at times unavoidable, that the mere presence of a crowd will cause an explosion.

The claim is advanced by certain psychologists that the masses can be brought into play only by the opportunity of destruction and debauchery; that hence the participation of the masses in a revolutionary process ends of necessity with the passing of the revolution from the destructive phase into the constructive; and that therefore the lust of the masses for destruction finds its outlet in the countermovements which seek to destroy the institutional creations of the revolution. Such a thesis, however, is not borne out by the experience of history. The Russian revolutionary state was not attacked from within. The interventions financed from abroad failed precisely because they carried destruction with them; and the revolutionary government, on the other hand, continually and increasingly has had the support of the masses in the constructive enterprises of the new order. Furthermore the actual history of revolution does not indicate that the masses are prompted into action solely by the urge for destruction and that they are destructive when in action. Revolutionary masses are not especially cruel or violent unless they are viciously provoked, and the distinction is to be borne in mind that masses are not mobs. A crowd in a revolutionary setting may appear either in a demonstration of protest or in a rather festive mood when the old power seems to be yielding. Crowds do not as a rule attack the well armed professional upholders of the old order, the soldiery or the police. They usually beseech these not to use arms "against their brothers, sisters, mothers and fathers"; and if the appeal does not help, the armed forces resort to violence and the crowds disperse. If no violence follows and the crowds are not provoked, there is no mass violence. If the pleas of the crowds are successful, there follow fraternization with the soldiers, great rejoicing and festive and peaceful parades to celebrate victory. Unless they act under the trying duress of attack from behind or from concealed sources, revolutionary masses are never destructive; and when attacked they

are no more cruel than, for instance, lynching mobs in the United States. Another even more important consideration, in view of the one-sided formulae of the crowd psychology school, is that the appearance of the masses upon a revolutionary arena need not and does not necessarily take the form of a crowd.

A point of fundamental significance is that disintegration of society and anarchy constitute only a relatively small phase of the revolutionary cycle: they are the circumstances which attend the passing of the old order. Revolution actually begins with the reintegration of the social organism along a new pattern and in response to a new correlation of social forces. It is set in motion when the old legal norms lose standing. The revolution is then law unto itself and its operations are not to be judged by obsolete standards. Any attack of the masses, whether in crowds or by the more effective means of social mass resistance, is, realistically speaking, not violence but the enforcement of the new superlaw promulgated by the very success of the revolution. The soldiery which attacks the revolution is a mob, whereas the masses who defend the revolutionary institutions are its courts of law and the administration of justice.

The rise of the masses to any kind of revolutionary action is generally prompted by a specific psychic urge, a pathology. They are aroused to an active defense of their self-respect, self-determination, inalienable rights and other sublimations of their urgent economic wants as well as their sense of oppression, of inferiority with which an oppressive social order imbues them. An effective appeal by a revolutionary leadership translates economic and political grievances into slogans which hold out the hope of redemption. Thus the rallying force of the slogan "dictatorship of the proletariat" lies not so much in the administrative promises which it carries as in the compensatory vision of a dictatorship which would usher in the economic security and independence so appealing to a class deprived of political status. Bolshevism harnessed this sense of oppression for the purpose of cementing a horizontal or class solidarity. Fascism turned the oppression psychosis into a driving force for vertical or national concentration.

The masses need not relapse into a recessive state after the explosive stages of a revolutionary overturn have passed. A revolutionary government capable of the transition from a

political system of managing-class economics to a functional social order would seem to be in a position to bridge the gap between individuals or groups, and masses. It would thus tend to minimize if not eliminate the necessity of resort to psychopathologies in order to draw the masses into an active participation in vital enterprises and would lay the basis for normal group living in integral social copartnership. Politics as the generator of pathologies would give way to organized and integrated functionalism, the basis of rational management of social affairs.

J. B. S. HARDMAN

See: CLASS; CLASS CONSCIOUSNESS; CLASS STRUGGLE; PROLETARIAT; MIDDLE CLASS; INTERESTS; AUTHORITY; EQUALITY; DEMOCRACY; NATIONALISM; CROWD; LEADERSHIP; BUREAUCRACY; PUBLIC OPINION; PROPAGANDA; AGITATION; REVOLUTION AND COUNTER-REVOLUTION; FRENCH REVOLUTION; RUSSIAN REVOLUTION; COUP D'ÉTAT; AGRARIAN MOVEMENTS; SLAVERY; VIOLENCE; INDIAN QUESTION.

Consult: Wiese, L. von, *Allgemeine Soziologie als Lehre von den Beziehungen und Beziehungsgebilden der Menschen*, 2 vols. (Munich 1924-29), adapted and amplified by H. Becker as *Systematic Sociology on the Basis of the Beziehungslehre und Gebildelehre* (New York 1932) chs. xxxiv-xxxvii; Wieser, F., *Das Gesetz der Macht* (Vienna 1926), especially chs. iii, iv, viii, xi, xiv and xvii; Geiger, T., *Die Masse und ihre Aktion* (Stuttgart 1926); Vleugels, W., "Wesen und Eigenschaften der Masse" in *Kölner Vierteljahrshefte für Soziologie*, vol. ii (1922) no. i, p. 71-80, "Der Begriff der Masse" in *Jahrbuch für Soziologie*, vol. ii (1926) 176-201, and *Die Masse, ein Beitrag zur Lehre von den sozialen Gebilden*, Beiträge zur Beziehungslehre, vol. iii (Leipzig 1930); Colm, G., "Masse" in *Handwörterbuch der Soziologie* (Stuttgart 1931) p. 353-60; Park, R. E., *Masse und Publikum* (Berne 1904); Fueter, E., "Individuen und Massen" in *Jahrbuch für Soziologie*, vol. ii (1926) 202-11; Lehmann, G., *Das Kollektivbewusstsein* (Berlin 1928), especially p. 152-65; Bauer, W., *Die öffentliche Meinung in der Weltgeschichte* (Potsdam 1929-30); Villard, A., *Histoire du prolétariat ancien et moderne* (Paris 1882); Pöhlmann, R. von, *Geschichte der sozialen Frage und des Sozialismus in der antiken Welt*, ed. by F. Oertel, 2 vols. (3rd ed. Munich 1925); Rühle, O., *Illustrierte Kultur- und Sittengeschichte des Proletariats* (Berlin 1930); Meusel, A., "Der Radikalismus" in *Kölner Vierteljahrshefte für Soziologie*, vol. iv (1924-25) 44-68; Michels, R., "Psychologie der antikapitalistischen Massenbewegung" in *Grundriss der Sozialökonomik*, vol. ix, pt. i (Tübingen 1926) p. 241-359; Niceforo, A., *Les classes pauvres. Recherches anthropologiques et sociales* (Paris 1905); Simpson, G. R., *Herder's Conception of "das Volk"* (Chicago 1921); Tillich, P., *Masse und Geist* (Berlin 1922); Berth, E., *Les méfaits des intellectuels* (Paris 1914); Ortega y Gasset, J., *La rebelión de las masas* (Madrid 1929), English translation (London 1932). See also bibliographies under CROWD; LEADERSHIP; MIDDLE CLASS; PROLETARIAT.

MASSIE, JOSEPH (died 1784), English writer on social and economic topics. Nothing is known of his life; he is referred to only as "well known for his political writings" in a bare death notice in the *Gentlemen's Magazine* (vol. liv, pt. ii, November, 1784, p. 876). The deferential inscriptions to statesmen in some of his tracts suggest the favor seeking pamphleteer rather than the detached student, an impression confirmed by the infrequent mention of his writings in contemporary economic literature. The number and format of his publications suggest that he may have been a printer-publisher as well as a writer. From 1750 to 1764 he wrote a series of tracts and pamphlets dealing with a wide range of contemporary social and economic issues. His importance as bibliographer is based on his *Alphabetical Index of the Names of Authors of Commercial Books and Pamphlets* (British Museum, Lansdowne MS. no. 1049), which by December, 1764, had grown to 2377 items and which still serves as the most helpful guide to English economic literature before Adam Smith. The collection on which it was based, gathered by Massie over a long period of time, was sold in 1760 and was thereafter dispersed, lost or hidden.

In 1760 Massie submitted the desirability of the preparation of two works, a "commercial history of Great Britain" and a treatise upon the "elements of commerce illustrated by Applications" to the commissioners of the Treasury and of the Exchequer and sought public employment therefor. Although nothing seems to have resulted from the proposal, the tract in which it was urged is still of interest as defining a need and suggesting an early conception that economic principles must rest upon economic induction.

His *Essay on the Governing Causes of the Natural Rate of Interest* (London 1750), written two years before Hume repeated—or, according to Marx, borrowed—the contention, is important in the pre-Smithian discussion of profits whether or not it is entitled to the distinction, accorded it by many critics since Roscher, of refuting the direct association of the rate of interest with the amount of money.

JACOB H. HOLLANDER

Consult: Palgrave, R. H. I., *Dictionary of Political Economy*, ed. by H. Higgs, vol. ii (London 1923) p. 706–09; Hollander, J. H., Introduction to reprint of *Essay on . . . the Natural Rate of Interest* (Baltimore 1912); Seligman, Edwin R. A., *The Shifting and Incidence of Taxation* (5th ed. New York 1927) p. 60, 93–94.

MASSINGHAM, HENRY WILLIAM (1860–1924), English journalist. The most brilliant Liberal publicist of the period immediately preceding the World War, Massingham tried to raise the craft of journalism to an ambitious art. His career illustrates both the defeat of personality in journalism by the dictatorship of capital and the political evolution of a generation from liberalism toward socialism.

He was the son of a radical Methodist preacher and began work at seventeen on the *Eastern Daily Press* of Norwich. At thirty he was editor in chief of the *London Star*. Shaw and other early Fabians wrote in this lively vehicle of radical thought, which focused the rising social consciousness around the London dock strike and the London County Council, then the pioneer of municipal socialism. From 1892 as literary editor and from 1895 as editor in chief of the *Daily Chronicle* he created a new type of newspaper which aspired to leadership in both literature and politics. With a brilliant staff to back him he seemed to inspire all mobile and sensitive opinion in Great Britain. Suddenly in 1899 the hitherto passive hand of ownership forced the resignations of Massingham and his staff because they opposed the Boer War. In 1907 he again acquired a personal organ in the *London Nation*, which he made the most readable and influential weekly of his time. Before 1914 it criticized the policy that led to war; thereafter it supported the war and was the leading advocate of a negotiated peace. In 1923 the owners forced the resignation of the staff chiefly because of Massingham's vehement opposition to Lloyd George.

Impulsive and sensitive, wielding a forcible pen with a rare sense of literary style, Massingham was not a systematic political thinker. He rejected both doctrinaire individualistic liberalism and Marxism. Henry George, Tolstoy and the Fabians all helped form his outlook. His sympathies ranged him on the side of such "underdogs" as Irish peasants, English workers, Boers, Indian and Russian revolutionaries. His faith in Liberalism, the historic party of progress, persisted until Lloyd George destroyed it in Ireland and by his war policy of the "bitter end." Although Massingham called himself a Liberal until 1923, when he joined the Labour party, the *Nation* supported the latter as early as the general election of 1918.

H. N. BRAILSFORD

Consult: Massingham, H. W., *H. W. M., a Selection from the Writings of H. W. Massingham*, ed. by H. J. Massingham (London 1925).

MASSON, FRÉDÉRIC (1847-1923), French historian. While serving as librarian of archives in the Ministry of Foreign Affairs from 1869 to 1880 Masson devoted his researches to eighteenth and nineteenth century diplomatic history, publishing: *Le département des affaires étrangères pendant la Révolution, 1787-1804* (Paris 1877), *Mémoires et lettres du cardinal de Bernis* (2 vols., Paris 1878), *Le marquis de Grignan* (Paris 1882, 2nd ed. 1887) and *Journal inédit du marquis de Torcy* (Paris 1884). His growing Bonapartist sympathies, however, impelled him to resign his official posts and to devote himself exclusively to the history of the First Empire. His works include more than sixty volumes besides a large number of articles and speeches. He had access to many private documents, and he gathered together an important collection of Napoleonic, which he bequeathed to the library of the Institut de France. His outstanding work, *Napoléon et sa famille* (13 vols., Paris 1897-1919), which typifies his general methodology, sought to correlate Napoleon's public policies and attitudes with his more intimate character and private life. Thus the early history of the empire was to be interpreted primarily as a reflection of the struggle between the Bonaparte and Beauharnais families for domination of Napoleon; but once the emperor was assured of his procreative powers he became obsessed with the idea of a legitimate succession and definitely broke with the earlier revolutionary movement. Masson's mastery of vivid and lifelike detail in the manner of Taine was offset by overcredulity in regard to sources and by overemphasis of minor individual relationships. But his violent loyalties were instrumental in stimulating interest in the personality of Napoleon and a more sympathetic appreciation of him, if not of the imperial regime.

RAYMOND GUYOT

Consult: Caron, Pierre, in *Revue d'histoire moderne et contemporaine*, vol. v (1903-04) 556-74.

MASTER AND SERVANT. See LABOR LEGISLATION AND LAW; LABOR CONTRACT; EMPLOYERS' LIABILITY.

MAS'ŪDI ABU-AL-HASAN 'ALI, AL-(died c. 956), Moslem historian and geographer. The writings of al-Mas'ūdi, styled "the Herodotus of the Arabs," ushered in a new era in Arabic literature, that of the historical anecdote. As a young man al-Mas'ūdi, who belonged to the Mu'tazilah, a rationalistic religious sect, undertook

a journey in quest of learning from his native Bagdad into almost every country of Asia and into Zanzibar. He spent the last years of his life in Syria and Egypt compiling the material thus collected into a thirty-volume work which has survived in an epitome, *Murij al-Dhahab wa-Ma'adin al-Jawhar* (Meadows of gold and mines of gems), completed in 947. In this historico-geographical work the author, with catholicity and truly scientific curiosity, carried his researches beyond the typically Moslem subjects into Indo-Persian, Roman and Jewish history and religion. His compilations resulted not in a systematic narrative but in disproportional sketches portraying public life, private manners, social affairs and literary achievements. Shortly before his death al-Mas'ūdi summarized his former writings in *Kitāb al-Tanbih w-al-Ishraf* (Notification and review; ed. by M. J. de Goeje, *Bibliotheca Geographorum Arabicorum*, vol. viii, Leyden 1894).

Like most other treasures of historical and geographical lore written in eastern languages, al-Mas'ūdi's works remained inaccessible to mediaeval occidental readers. De Meynard and de Courteille made a French translation, including the text, of *Murij (Les prairies d'or)*, 9 vols., Paris 1861-77). De Vaux translated *al-Tanbih* under the title *Le livre de l'avertissement et de la revision* (Paris 1898). But al-Mas'ūdi's influence over Arab authors was second only to that of al-Tabari. Ibn-Khaldūn considered him "a veritable leader for all historians."

PHILIP K. HITTI

Consult: Carra de Vaux, Bernard, *Les penseurs de l'islam*, 5 vols. (Paris 1921-26) vol. i, p. 95-105; Nicholson, R. A., *A Literary History of the Arabs* (2nd ed. Cambridge, Eng. 1930) p. 352-54; Brockelmann, Karl, *Geschichte der arabischen Litteratur*, 2 vols. (Berlin 1897-1902) vol. i, p. 143-45; Huart, C., *Littérature arabe* (Paris 1902), tr. by Mary Loyd as *A History of Arabic Literature* (London 1903) p. 182-83.

MATCH INDUSTRY. While the invention of the match dates from the beginning of the industrial revolution, some of the elements of match-making precede that period. White, or yellow, phosphorus was discovered by Brand of Hamburg in 1673, and in 1680 the Englishman Godfrey Haukwitz discovered ignition of sulphur and phosphorus by friction. But the first friction match for practical purposes was not produced until 1827, when the English druggist John Walker rubbed along a strip of sandpaper a splinter of wood that had been dipped into a mixture of chlorate of potash (which had been

discovered by Berthollet in 1786) and sulphide of antimony. The use of these chemicals in the friction matches sold by Walker and others in tin boxes provided with strips of sandpaper was found unsatisfactory; and it was not until the 1830's that experiments were made with dipping into yellow phosphorus, first by the Frenchman Charles Sauria in 1831 and later by Kammerer of Württemberg, who opened one of the first match factories on the continent. Between 1835 and 1845 the production of lucifer matches increased rapidly throughout Europe; Vienna was the largest single center. In 1836 the first manufactory in the United States was established in Springfield, Massachusetts.

These early match factories were based entirely on hand labor, mainly that of women and children, and were housed in small unventilated rooms. The poisonous phosphorus vapors resulted in serious lung complications, in digestive disturbances and in phosphorus necrosis of the jaw, first discovered in 1838 in Vienna. Danger of fire and explosion was also present. Match manufacturing was prohibited in some of the German states in the late 1830's. In 1844 Professor Pasch of Stockholm made the first safety match without sulphur or phosphorus, and in 1845 the Viennese chemist von Schrotter discovered the non-poisonous red phosphorus. Prohibition by the canton of Zurich in 1846 of the use of white phosphorus in manufactures was followed by similar legislation in other regions of Switzerland and by national legislation in 1879. In 1864 the French chemist Lemoine discovered another non-poisonous substitute for white phosphorus, sesquisulphide of phosphorus; but this was not put into available form for match manufacturing until 1898, through the patented processes of Sévène and Cahen. It was used thereafter mainly in the match industries of France, Great Britain and the United States. In 1906 an international agreement was reached to refrain from the use of white phosphorus. This agreement, the first of its type, was found necessary because of the intense international competition in the match trade and the humanitarian agitation aroused in the 1890's and the early portion of the twentieth century in France, Belgium, England and Austria. Despite numerous investigation commissions since 1828 Austria passed no legislation before 1906; in the period between 1866 and 1875 there were 126 cases of necrosis of the jaw reported in Vienna alone. In Great Britain 102 cases of necrosis of the jaw, of which nineteen were fatal, were re-

ported up to 1899. It was estimated in 1909 in Great Britain that less than 1 percent of the workers had been affected by the disease, in Switzerland prior to legislation 1.6 to 3 percent and in France 2 to 3 percent. The signatories to the agreement were Austria, Denmark, France and its colonies, Germany, Great Britain and the crown colonies, Italy, Luxemburg, the Netherlands and the Dutch Indies, Spain and Switzerland. New Zealand, Hungary and Mexico joined in 1911, Canada in 1914. The United States did not join in this agreement, but in 1913 the Esch-Hughes Act by means of a prohibitive tax made unprofitable the use of white phosphorus, which represented a manufacturing cost of only 6 percent less than the other forms. Until 1919 and 1922 respectively Sweden and Norway prohibited the use of white phosphorus only in home consumption. In 1919 the agreement of 1906 was reaffirmed by a new agreement, which included Poland, Czechoslovakia and the Irish Free State. Russia previously to the World War had no regulation and Japan did not prohibit the use of white phosphorus until 1922, although it had extremely careful regulations against employing persons with carious teeth, regulations as to the separation of the various processes and as to food, clothing and the like. Rumania passed prohibitive legislation in 1924, China and Palestine in 1925 and Bulgaria in 1926. Some dangers remain in the use of sesquisulphide, which acts as an irritant, causing conjunctivitis, oedema of the eyelids and skin eczema; these may be prevented, however, by precautionary measures.

Although the match industry has never been large, it developed rapidly as consumption demands arose, particularly in highly urbanized countries, where the gas stove replaced the wood stove for cooking, and with the increased consumption of cigarettes and cigars. Great Britain's consumption of matches in 1925 was estimated at five per capita per day, more than double that of 1871, and consumption in the United States was probably still higher. In India the consumption is estimated at one per capita per day.

The development of the industry was also aided by the perfecting before the end of the nineteenth century of almost all the automatic machinery still in use today, which has mechanized every process from the drying and splinting of wood and the mixing of chemicals to dipping, packing, box manufacturing and the like. The principal manufacturers of this ma-

chinery were concentrated in Sweden, Germany and the United States; and with the development of the Swedish world trust German and American machine manufacturing fell under its control.

The labor force in most countries is predominantly composed of women, and in some of the backward countries child labor is largely used. In China indentured child labor and a thirteen-hour day were still in force in 1925. In India female labor is so abundant and cheap that child labor is not employed. Where labor is so cheap, the "cottage" industry and hand processes persist. In China, Japan and India manufacturers follow the policy of recruiting labor from the provinces and of company housing. In 1910 the use of child labor elsewhere was cited as a competitive advantage by American manufacturers, who also claimed that daily wages in Germany were \$.835 to \$.955 and in Belgium \$.68 to \$1.40 as compared with \$2 to \$3.30 in the United States. British manufacturers cited the difficulties of foreign competition in pointing to a fourfold increase of wages in the British match industry between 1900 and 1920 and a reduction of hours from sixty to forty-seven during the same period. Whereas American workers are not organized in labor unions, English match workers as early as the 1880's went on strike and formed a union of eight hundred women. The English match industry was one of the first to enter into the Whitley Councils scheme, which fixed for it a minimum rate of wages, a forty-seven-hour week, annual holidays and additions to the statutory workmen's compensation. Following an order of the Council for the Match Industry in 1925 that unorganized workers would not be entitled to representation, the industry achieved a 90 percent trade union organization. Swedish and German workers have been able to secure relatively favorable working conditions through comprehensive trade union organization without the necessity in recent times of conducting major strikes. Of the three thousand German workers two thirds are women; of the six thousand Swedish workers only half are women. In 1930 wages in Sweden were 2400 crowns annually for men, 1500 for women and 1300 for minors. Organized labor was recognized by the French government monopoly and has played an active role in the strike of 1879, in its agitation for the prohibition of white sulphur and in the protest against the control of the Swedish trust. In recent years strikes have occurred in the match factories of India. Even

after post-war consolidation labor costs remain everywhere a competitive item.

At the present time the struggle for raw materials is not important. Because of the fact that lumber is the largest item in material costs, the nearness of Sweden to the aspen forests of Russia, Finland and eastern Europe together with its superior technology secured for it the position of supremacy over Austria, which up to 1855 had been the principal export country. In Great Britain and the United States Canadian pine has been used, but this wood requires more careful grading than aspen and is less satisfactory. Japan's nearness to timber supply has been one of the factors in the great development of its industry since 1870, and in recent years the Indian match industry has turned increasingly to its own government forests for timber. The chemicals used—chiefly potassium chlorate and compounds of sulphur for the head and dextrin, amorphous phosphorus and antimony sulphide for the striking surface—have not involved any serious problem of supply. The chief source of supply has been Germany, although more recently Sweden, Japan and to some extent Great Britain have developed their own production of chemicals for use in domestic manufacture and for export. Russia is engaged in an attempt to supply its own chemicals. Sweden and Japan also produce the paper, printing and other items needed in match manufacturing.

Because of these factors and since the establishment of a factory required relatively little capital, the period between 1880 and the World War witnessed a vast number of small workshops in every country, including China and Japan. Even in countries with a vast internal market, such as the United States, Germany and Great Britain, the industry was soon faced with overproduction and with domestic and foreign competition. In the course of this struggle several governments which had originally taxed the match industry established monopolies over it. Russia in 1848 had been the first country to establish a match tax, but because of systematic evasions, which were made fairly easy by the small size of the match factories of the time, the tax did not succeed in raising the projected revenue. France established a similar tax in 1871; this likewise failed and was replaced the next year by a monopoly. Events followed a similar course in several other countries, and before the war monopolies had been established also in Spain, Portugal, Greece, Serbia and Rumania. The monopoly may be either a full or

a trading monopoly and usually covers lighters and other devices as well as matches. The economic reactions of these monopoly measures upon the match industry were far reaching: numerous match factories had to be shut down to make the monopoly profitable and the import and export of matches were gravely affected. The measures had less important effects upon consumption, which is scarcely affected by price movements. In France the profits of the match monopoly rose from 19,800,690 francs in 1891 to 30,636,483 in 1911. During the post-war period prices rose 100 percent and profits rose in 1922 to 67,000,000 francs, forming a considerable contribution to the national income. Labor conditions in the government factories are carefully regulated; before the substitution of amorphous phosphorus vast amounts were paid out in compensation for sickness. An investigation of the operations of the industry in 1924 showed a rising cost of production in contrast with the falling costs in the privately owned large factories elsewhere.

The match industry has been most successful in the United States and Sweden; the former country has supplied chiefly its own large domestic market, the latter the world market. In the United States the industry has been protected by a high tariff since 1890 and the processes of consolidation and of technical progress began early. In 1869 there existed seventy-five factories with a total force of 2556 workers. In 1881 the Diamond Match Company became the dominant firm in the industry. By 1909, although the number of factories was reduced to twenty-six, the value of the total production, \$1,353,000, was double that of 1869 and the number of workers had increased to 3631. In 1895 the patents of the Diamond Match Company were worth fully as much as its capital stock; it began to purchase timber areas and to promote plants in foreign countries, where it acquired patent protection usually on a basis of retaining a controlling interest in the foreign enterprise. It even anticipated the later policy of the Swedish trust, erecting factories in foreign countries for the purpose of drowning protests against outside competition. In 1896 it erected in Liverpool the largest match factory then existing. In 1898 a branch company was organized in Switzerland, another began operations in Brazil and other plants were projected or in operation in Germany, Peru, Canada and Cape Town.

In 1899 the Diamond Match Company established a community of interests with the Con-

tinental Match Company, controlled by Edwin Gould, which had three large factories in the United States. Of sixteen factories reporting in the discussion of the Esch-Hughes Bill in 1911 five were controlled by the Diamond Match Company, which produced 70 percent of the industry's output. Although it claimed to produce matches with "25 percent of the manual labor of any other known processes in the world," the price of matches almost doubled under its control. In 1931 seventeen factories employing 3200 workers produced goods of a total value of \$17,927,000—a decrease of 12 percent over 1929. Imports in the same period decreased from \$3,442,690 to \$1,435,497.

A similar development had taken place in Sweden. Large scale production had been in evidence as early as 1863 by the Jönköpings Tändsticksfabrik, one of the engineers of which, Alexander Lagerman, perfected the match automatic in 1892. In 1903 severe competition in the world market, which was progressively diminishing the profits of the Swedish industry, led to the consolidation of six of the leading match factories into the Jönköpings och Vulcans Tändsticksfabriksaktiebolag. In 1913 at the initiative of Ivar Kreuger the other match factories also consolidated into the Aktiebolag Förenade Svenska Tändsticksfabriker; the production of the latter, however, was only one third that of the Jönköpings concern. In the period between 1861-65 and 1913 the number of workers increased from about one thousand to about seven thousand; exports from an average of 1,700,000 kilograms to 34,600,000; the value of match products from an annual average of 508,000 crowns to 17,800,000. In 1929 about six thousand workers were employed and the value of match products was about 38,000,000 crowns.

Other important producing countries in the western world market were Belgium, Austria and Russia and in the far eastern market Japan. In the pre-war period on the basis of number of workers employed in the industry Japan and Russia were in the lead with 21,400 and 15,668 respectively, while Italy, Sweden, Germany, Austria, Hungary, Great Britain and the United States followed in the order named. Available production figures, however, showed in 1910 Sweden and Norway together to be of first importance, with 24,290 gross boxes per annum; the United States was a close second, followed by Great Britain, Germany and Austria. Export figures for 1910 revealed Sweden's predominance to be even more pronounced in the world

market. In practically every one of these countries, notably in Great Britain, Germany and Belgium, the pre-war period was marked by a series of consolidations; these were unsuccessful, however, in checking overproduction and severe domestic and foreign competition.

After the World War competition in the international field was even more intense. Japan had increased its production; Poland had set up a government monopoly which came increasingly to supply its consumption needs; and Czechoslovakia and the Baltic countries, all of which were near to sources of lumber supply, began to develop their industries. In 1919 and 1920 plans were made for an international match cartel under the leadership of the Swedish match industry, but these endeavors failed and the agreements proved to be valueless whenever their violation involved any profit. Since the problem of overproduction could not be solved by cooperation, the strongest industry, the Swedish, finally solved it by defeating all others in ruthless competition.

Weakened by outside competition, the Jönköpings and the Kreuger Aktiebolag Förenade Svenska Tändsticksfabriker consolidated into the Svenska Tändsticksaktiebolag in 1917, and it was this trust which soon gained control of the world match industry. In 1920 it bought up the seven independent match factories in Belgium, an important competing country, and soon thereafter purchased stock in the Belgian trust. It reached an all inclusive agreement with the match industries in the Danubian countries, formerly so powerful. It bought up factories in the neighboring countries of Norway, Denmark, Finland, Estonia, Latvia and Lithuania, which although not yet large exporters were potential rivals. In 1923 it established the powerful International Match Company in the United States as a selling agency. In 1924 it began operations in India; prior to the war Sweden had supplied 30 percent of the total Indian consumption, a proportion later decreased by Japanese competition. Confronted by a high tariff wall it proceeded to purchase control of the local factories; in 1927 it operated six and in 1931 eleven of the largest factories in India. Its attempts to enter Japan were temporarily resisted, but it finally gained control of one of the two large Japanese match companies, which in turn had interests in China. In the United States, where as in India it was barred by a tariff wall, it first gained control of the Federal Match Company and in 1931 through a secret deal bought up the new

stock issued in connection with an increase of capital of the Diamond Match Company.

In countries in which match manufacturing was a state monopoly and which were at the time in need of national loans the Svenska Tändsticks embarked upon a new policy of granting large loans at a low rate of interest in exchange for the grant of a monopoly or for a large share in such a monopoly. In 1932 the Svenska Tändsticks had a monopoly in Germany, Estonia, Lettland, Lithuania, Danzig, Poland, Rumania, Yugoslavia, Greece, Turkey, Ecuador, Peru, Guatemala, and a very strong position in France, England, Switzerland, Austria and other countries. The control had a legal foundation and rendered the position of the trust far more invulnerable than in those countries where it held an ordinary commercial monopoly and where there was always the danger of the establishment of new factories or of outside competition (especially from Russia in the period between 1926 and 1929).

This policy of expansive and extensive control was financed by means of a continuous reissue of stock, a good portion of which was given in exchange for the control of already existing local trusts. Direction and the issue of stock always came from Stockholm. Since under the Swedish law foreigners were permitted to hold no more than one fifth of the stock, the new issues were almost entirely of preferred B stock, each with a thousandth of a vote. As the new issues were sold on the stock markets of the world, usually far above par value, the proceeds were used for further expansion. In 1918 this stock was increased to 45,000,000 crowns. In 1922 the share capital was doubled, two fifths of the new stock being issued on the British market; in 1924, 900,000 B shares were issued, of which 271,500 were put on sale in the stock market. By 1931 the capital had reached 360,000,000 crowns, or \$96,480,000, of which there were 2,700,000 B shares and 900,000 A shares. Svenska Tändsticks had penetrated the stock markets of the world.

The multifarious interests were largely consolidated in four great subsidiaries, the original two Swedish concerns, the British Match Corporation of London and the International Match Company. Some of the monopoly rights were owned directly by the parent Swedish firm; others belonged to the American subsidiary and others to Kreuger and Toll, which played an important part as the financing institution; still others were owned jointly by other firms. The

parent Swedish firm obtained only a small part of the capital necessary for the building up of the concern. The American subsidiary was founded especially in order to raise this capital, and it is for the same reason that such importance was attached to the development of relationships with England. The capital invested in the entire concern was estimated to total between two and three billion crowns. The ownership of factories was also concentrated in the parent Swedish firm and in the British and American subsidiaries; in 1931 the trust owned about 250 match factories in forty-three countries, employing over sixty thousand workers, as contrasted with sixty-two factories in 1924. In addition it controlled vertically and horizontally important industries which in some cases incidentally controlled raw materials and some of which had previously been the property of the British, American and Swedish trusts. These properties in many cases were more valuable than the actual match factories.

In only a few countries did the match industry remain free from the control of the Swedish trust. Of these Spain, Bulgaria and the South American and near eastern countries did not produce in sufficiently large amounts to menace the position of the trust. Italy was somewhat more important, especially as its exports increased after the war. It was Russia which proved a powerful rival. Its pre-war production of 4,500,000 boxes was almost equalled in 1926; exports then also stood at the highest pre-war figure. In the period between 1927 and 1930 Russia's production increased 50 percent and export trade was considerably extended. Its competition was felt by the Swedish trust particularly in Germany and England, but with the conclusion of the German monopoly agreement in 1930 these markets were lost to Russia. For a time it seemed that the Swedish match industry might eliminate Russian competition or possibly reach a formal agreement with the Soviet government.

Like every international trust the Svenska Tändsticks aimed theoretically to manufacture at the most advantageous places throughout the world (conceived as a single economic area), thus attaining the highest possible productivity of labor with a resultant lowering of prices to consumers and the achievement of the maximum of profits. An obstacle to the absolute attainment of the first goal was formed by the desires of various nations to develop a more or less self-sufficing match industry at all costs. In adapting

itself to this policy by buying up factories in countries with high tariff walls, the trust, which might have been expected to favor free trade, aided the high tariff policies, for example, in India and Australia. Everywhere, however, production was rendered more efficient, unprofitable plants were dismantled and newly acquired factories were technologically modernized. In Sweden by the establishment of stricter discipline and by the replacement of man power by electrical power wherever possible the trust achieved a 10 percent increase in the production of the individual worker within the decade ending in 1924. Even greater economies were effected in such countries as India, where labor costs decreased by two thirds in three years. Nevertheless, because of lack of adequate data neither the extent of the economies in the sphere of world production nor that of the savings in the field of distribution can be determined exactly. The extensive advertising campaigns which were begun when the trust was gaining a market were always reduced to a minimum after the market had been conquered. Likewise the trust could reduce to a minimum the costs of purchasing and selling. As a purchasing agent its development along the lines of a horizontal and vertical combine must have involved considerable economies.

Despite this increased efficiency match prices rose continually. It was claimed that they had been abnormally low in the period of competition and of rising or new taxation. But match prices rose much higher than the general price level; and in only a few countries and to a limited extent—as, for instance, in the cooperative production in Germany and Finland—were consumers able to protect themselves against the price fixing policy of the trust. Even where prices were fixed by the government, as in Peru, the dominant role of the trust caused this price fixing to be only apparently a matter of public policy. The increased prices were reflected in the trust's increased profits, even on its overcapitalization. A 5 to 10 percent rise in prices might be barely noticed by the retail consumer, but a 10 percent rise actually meant an increase of 100 percent in profits for the trust. At the end of 1923 the International Match Company claimed a profit of over \$3,900,000 on sales of over \$16,500,000 and the following year a profit of \$4,800,000 on sales of over \$20,500,000. In the last few years preceding its breakdown the dividends paid by the trust ranged from 12 to 15 percent.

The organization of the trust was in fact designed rather to bring about this end than to effect the theoretical economies of a production for an international market. The structure of the trust, the concentration in voting power and the complexities involved by the financing program of its directors led inevitably to uncontrolled and uncontrollable policies, of which Kreuger's manipulations were only one manifestation.

The collapse of the Swedish match trust in 1931 created an entirely new world situation. At the end of 1931 the Svenska Tändsticks had outstanding obligations totaling 457,000,000 crowns besides guaranties, collateral and security obligations, which probably rose considerably during the first few months of 1932. A few months after Ivar Kreuger's suicide, when there fell due short term obligations which could not be met, the Svenska Tändsticks was granted a moratorium. A great part of the share capital of 360,000,000 crowns and the reserves of 245,000,000 crowns were considered lost. Its most important subsidiary, the American International Match Company, has already declared itself bankrupt.

The future of the trust—and hence that of the world's match industry—is uncertain. It is possible that a new firm may buy up the trust's assets and rights; it is likewise possible that Svenska Tändsticks may be able to continue operations. But there also exists the possibility that the trust will disintegrate, that the match industries of the various countries may again become independent of Stockholm and that bitter competition will begin once more. But the new competitive struggle would be fought on a new basis. In Poland and the Baltic states—and in fact in almost all the countries in which the Swedish match trust shared a manufacturing monopoly—the old factories have been modernized and new ones built, so that these countries produce much more efficiently than before the World War; indeed they are just as strong competitively as the Swedish factories. Should a new competitive struggle break out in the world market, the predominant position of the Swedish match industry would be imperiled for the first time and the ranks of Sweden's former competitors—Belgium, Austria, Japan and Russia—would be joined by other countries, some of which could probably offer matches at lower prices than the Swedish factories.

WILHELM GROTKOPP

See: COMBINATIONS, INDUSTRIAL; HOLDING COMPANIES; MONOPOLIES, PUBLIC; INDUSTRIAL HAZARDS; INDUSTRIAL HYGIENE.

Consult: Schaff, Erich, *Internationale Verflechtungen in der Zündholzindustrie: Ein Beitrag zur Kollektivierung der modernen Wirtschaftsordnung*, Hessische Beiträge zur Staats- und Wirtschaftskunde, vol. ii (Leipzig 1929); International Labour Office, "Lucifer Matches" in *Occupation and Health*, Brochure no. 7 (Geneva 1925); Clark, V. S., *History of Manufactures in the United States*, 3 vols. (new ed. New York 1929) vol. iii, p. 292-93; United States, Congress, House of Representatives, Ways and Means Committee, *White Phosphorus Matches: Hearings*, 3 vols. (1910-12); Dixon, W. H., *The Match Industry: Its Origin and Development* (London 1925); France, Commission Chargée d'Étudier les Questions Concernant l'Organisation et le Fonctionnement des Monopoles des Tabacs et des Allumettes, *Rapport présenté par M. André Citroën* (Paris 1925); Rives, Marcel, *Le monopole des allumettes en France* (Paris 1925); Grotkopp, Wilhelm, *Der schwedische Zündholztrust*, Nordische Studien, vol. viii (Brunswick 1928); Freude, Siegfried, *Der schwedische Zündholztrust*, Nürnberger Beiträge zu den Wirtschaftswissenschaften, vol. viii (Nuremberg 1928); Schwarzenberger, Georg, *Die Kreuger-Anleihen. Beitrag zur Auslegung der internationalen Anleihe- und Monopolverträge sowie zur Lehre vom Staatsbankrott* (Munich 1931); Marcus, Alfred, *Kreuger und Toll als Wirtschaftsstaat und Weltmacht* (Zurich 1932); Mennevée, Roger, *Monsieur Ivar Kreuger le roi des allumettes* (Paris 1932); Sparling, Earl, *Kreuger's Billion Dollar Bubble* (New York 1932); Hurth, Carl, *Die deutsche Zündholzindustrie in der Nachkriegszeit*, Münchener volkswirtschaftliche Studien, n.s., vol. viii (Jena 1929); Spickermann, Edmund, *Die Bedeutung des Zündholz- und Tabakmonopols für die Finanzgestaltung des neuen Polens* (Lodz 1928); India Tariff Board, *Match Industry*, vols. i-iv (Calcutta 1928-29); Vakili, C. M., and others, *Growth and Development in Modern India* (Calcutta 1931) ch. xiii; "Match Industry in China" in *Chinese Economic Journal*, vol. x (1932) 197-211.

MATERIALISM as a philosophy arose out of an attempt to substitute for religious cosmogonies an account of the world drawn from principles and materials familiar to man in everyday activity. Although the theories of the early Greek physicists that the original stuff or abiding principle of things (*physis* has been variously interpreted) is water, air or fire already express a materialistic approach, it was not until Democritus that materialism emerges as a systematic philosophy. 'The fundamental proposition of Democritus' thought is that nothing exists save the movement of atoms in the empty void; all else is illusion. "By use there is sweet, by use there is bitter; by use there is warm and by use there is cold; by use there is color. But in sooth there are atoms and the void." Differences in quality are reduced to differences in the number, size, shape and configuration of atoms, whose

movements are determined by eternal and necessary law. The soul itself consists of fine, smooth atoms, whose motion produces the phenomena of life. There are no immaterial active entities. Here are expressed in the crude form of the science of the day the characteristic doctrines of almost all subsequent materialist philosophy.

Epicurus and his followers took over the whole of the Democritean atomism. Their only modification was to introduce in the primal downward course of atoms a chance deviation in order to set up the swirl out of which in time the world was generated. In Epicurus and Lucretius the materialist philosophy serves the purpose of what may be called personal hygiene or personal salvation. It is invoked to free men who have the means to enjoy leisure from the fear of death, the gods and the blows of adversity. Since the soul is composed merely of the most rarefied and mobile of the atoms, death is nothing but their dispersion into space and the annihilation of all consciousness; and as there is no pain where there is no consciousness, a wise man will not fear death. Denying that purposive acts from without can ever interfere with the natural course of atoms, Epicureanism relegated the gods of popular theology to the stellar spaces, where they live the lives of Epicurean philosophers in complete independence of society. Pleasure or the absence of pain—produced by gentle motions within the body—is the chief good. Since the locus of consciousness is the material soul, the only evil which man can experience is disturbance of mind. Indeed pain of the body is only one type of disturbance of mind and can be banished by cultivating the arts of philosophy and conversation. From quite different premises and with a different motivation the stoic philosophers embraced a thoroughgoing materialism of a peculiar character. The good is defined not as a quality of human desire or consciousness but as the fulfilment of objective and necessary laws of one physical whole in which all events are pre-determined. Man's thought and emotion, his ideas of the good and the right, are merely expressions of the organization of bodies. Morality is not only natural but literally and actually physical. The universal and eternal "natural laws of justice based on reason," to which later western thought always appealed in opposition to the conventional theory of morality and from which were derived the revolutionary doctrines that slavery is against nature and that all men are born equal, were not put forward as ethical resolutions but as propositions in physics.

Although Aristotle had polemicized against Democritus and atomists in general on the ground that they could not properly explain the transition from potentiality to actuality which his own doctrines of final forms and inner teleology were designed to meet, none the less certain elements of the Aristotelian philosophy provided the only materialistic vestiges in the spiritualistic tradition of Platonized Christianity. Aristotle's naturalism, which ruled out the Judaeo-Christian dualism between the creator and the created through the doctrine of the eternity of the world and of motion, reappeared in the Averroism of the thirteenth century. Aristotle's "behavioristic" psychology, which taught that the soul was the form of the body and consequently could not exist in independence of the body, came into conflict with the orthodox doctrine of immortality. Aquinas himself by accepting the Aristotelian view that matter is the source or principle of individuality (*principium individuationis*) barely escaped the charge of heresy on the ground that this militated against the existence of immaterial individuals, such as angels and the souls of the dead unhoused in any bodies until the day of resurrection.

Even more important, Aristotle's contention that only concrete individual substances, or wholes, are real offered a basis for the nominalists to attack the existence of substantial forms in both their Platonic (*universalia ante rem*) and Aristotelian (*universalia in re*) forms. The social implications of the nominalistic interpretation of universals were enormous. It meant first of all an attempt to break down the intellectual authority of the church with the heretical doctrine of the twofold, or double, truth. Further by maintaining that only individuals were real it suggested that all associations—from the holy and universal church to the secular provincial guild—had a derivative status and could claim no higher reality or rights than the activities and desires of its individual members. Theoretically nominalism justified an appeal to natural rights doctrines in politics; practically it expressed the dissident tendencies of local church organization in opposition to a central revenue gathering agency whether situated at Rome or at Avignon.

The historical resurgence of materialism in modern European thought was marked by the introduction of experimental method and the development of mechanistic atomism among the philosopher-scientists of the sixteenth and seventeenth centuries. Stimulated by the needs of industry and war, men like Leonardo da Vinci

and Galileo were led to an investigation of the controlling conditions of natural phenomena. This meant a shift to the measurement of the simplest physical relations observable in nature and the extrusion of all attempts to explain occurrences in terms of forms, essences or qualities. These were themselves taken to be the effects, not the causes, of the movements of material particles; and the way was open for speculative materialism to project its mechanical explanation of phenomena into all realms of experience which were temporarily or structurally involved with physics. The two main lines taken by the materialist philosophy were expressed in the schools which followed the thought of Descartes in France and Bacon in England.

Descartes' rationalistic mechanism, despite his rejection of atomism and his predilection for mathematical abstraction instead of experiment, led him logically to a materialistic solution of the psychophysical problem. Although he called the universal cause and substance of all movement God, in his explanation of the motion of specific bodies he used only familiar dynamical principles, such as the conservation of momentum and mechanical laws of impact, conduction and the like. A dualist in his metaphysics, he was strictly monistic in his physics, introducing no distinction between organic and inorganic nature. Plant and animal behavior were assimilated to the behavior of machines. His followers in France continued this line of thought and, to the dismay of Descartes himself, sought to explain the human soul and its succession of ideas as modes of the body. In the eighteenth century Lamettrie, a physician who proclaimed the celebrated doctrine that man is a machine, explicitly avowed himself to be a Cartesian.

In England it was Francis Bacon who sounded the tocsin of revolt against metaphysical spiritualism. Although his own ideas of scientific method were narrow, crude and not altogether consistent, his attempt to substitute for the Platonic-Aristotelian conception of substantial forms the Democritean conception of form as "the law of the process by which things arise" provided a powerful stimulus to the revival of atomism as a basis for materialism. Hobbes systematized what Bacon had begun. In one of the most extreme and thoroughgoing systems of materialism the world has ever seen he stated the fundamental propositions that all change is motion and that geometry, mechanics, physics, ethics, politics, are sciences concerned with tracing the effects of motion in the domain of

nature, mind and society. From these premises Hobbes argued consistently enough that all psychical phenomena from the secondary qualities to the highest reaches of the mind were "apparitions," lacking both substance and objectivity. He uses synonymously the terms ghost and incorporeal substance. The most celebrated use to which Hobbes put his materialism was to offer it as the foundation of political absolutism. The fundamental law of motion expresses itself in human behavior as the impulse to self-preservation. Pleasure arises when the impulse to self-preservation realizes itself in the exercise of power; pain, in the actual or anticipated frustration of this impulse. In a state of nature, other things being equal, the pain of suffering men's power over us far outweighs the pleasures of imposing our power over them. Reason, which is grounded in human nature, suggests instead of the reciprocal destruction involved in the war of all against all that there be formulated "convenient articles of peace, upon which men may be drawn to agreement. These articles, are they, which otherwise are called the Laws of Nature." Hobbes does not assert this agreement or contract to be a recorded historical fact; he contends that it is involved in the very existence of a stable community. The validity of such laws depends upon the existence of an absolute and indivisible sovereign power to enforce them. Absolute monarchy is the best form of sovereignty. The monarch as the repository of all existing law and the source of future law has the right to total obedience until he is overthrown.

The influence of Hobbes' materialism, reenforced by Locke's theory of experience, was to reappear in the philosophy of the French Enlightenment—especially in the writings of Lamettrie, Diderot and Holbach. Accepting from Hobbes the proposition that the world consists only of matter in motion and from Locke that all ideas and knowledge are derived from experience and reflection—which Condillac and Helvétius, Locke's disciples, reduced to sensation—the French materialist school now faced the central problem of explaining the way in which sensation or consciousness arose from the movements of matter. Diderot offered the bold solution that "sensation is a general property of matter, or a product of its organization." Differences in the degree of consciousness were correlated with differences in the complexity of material organization. Mind was a function of matter in the same way as light, heat and sound. Correlated with this view was the belief that mental

phenomena obeyed the same mechanical laws as matter. The difficulties of deriving the unity of consciousness from isolated elements of vague feeling in material bodies were no more adequately met than in the writings of the German materialists of the 1840's. The primary motivation of both the French and the German school of materialism was not the creation of a consistent theoretical system but the discovery of a starting point for political, religious and social reform. Nothing was more congenial to the social reformers and humanitarians than the proposition that man is completely the product of his environment and that the differences between virtue and vice, knowledge and ignorance, may be controlled by changing the environmental stimuli. At one stroke the doctrine of original sin and natural grace were ruled out in accounting for differences in political, social or biological status; the way was cleared for the infinite perfectibility of man through reasoned control of nature; and a fervent belief in the possibility of a science of human welfare, as objective as the principles of motion which were at its base, took possession of the foremost thinkers of the materialist school.

The intensification of the social question in the nineteenth century was largely responsible for the rise of a new type of materialism, the dialectical materialism of Karl Marx and Friedrich Engels. In a formal philosophic sense this doctrine is descended, at least on one side, from German idealism, which began with Kant and culminated in Hegel. Following Hegel's death a reaction toward naturalism set in among a group of his followers, who felt that the master's philosophy led too much in the direction of political conservatism and religious mysticism. These rebellious followers sought, however, to retain the emphasis on the dynamic character of experience and particularly on the active role of consciousness in social life, which had been largely neglected by naturalist and materialist philosophies. In the case of dialectical materialism even the dialectical method of Hegel was taken over, modified and set to function within a materialist context. A full exposition of its principles is given in the succeeding section of this article. Here it is sufficient to note that its development took place in the period from the 1840's to the 1890's within the circle of the Marxian socialist movement. It remained largely unknown to non-socialist thinkers, and even among professed Marxian socialists it was not always accepted. The success of the Communist revolution in

Russia has, however, made it the official philosophy of the Soviet Union and has given it a new character as a contemporary force.

The nineteenth century witnessed an extension of the materialistic modes of thinking to psychology and biology but at the same time it revealed the inadequacies of the traditional materialism, which sought to reduce the laws of animal behavior and of human thinking to the simple successions of mechanics. The natural adaptation of animal species to their environment, which had hitherto seemed too complex and widespread to be attributed to happy accident, now received a plausible interpretation in terms of variation, selection through struggle for existence, and hereditary transmission. Evidence that new species arose through modifications of the old strengthened the hypothesis of the unitary origin of all life and furthered the tendency to treat man and his every activity as part of natural history. Investigation of the physiology of the sense organs and of the nervous system, although it resulted in a repudiation of the naïve mirror theory of sensation, brought to light the thousandfold dependence of psychic experience upon the organization of the body and occurrence of external stimuli. But as the gaps in human knowledge were progressively eliminated through discovery and experiment, it became clear that what was distinctive in the behavior of each type of structure could not be deduced from the behavior of the simpler types. The laws of biology presupposed those of physics, the laws of psychology those of biology; but each set of laws has to be treated as genuine emergents, otherwise the novelty and variety of the world would have to be read back into the mechanical configuration of the primordial slime. By the end of the century the very "solidity" which materialism had derived from its appeal to mechanics vanished in the electromagnetic interpretation of matter, according to which even mass is no longer a constant. From different directions today the quantum theory and the theory of relativity have contributed to undermining other assumptions of traditional materialism—such as the absoluteness of space and time and the universality of determinism and of the causal relation. The alleged idealistic implications of modern physics have induced a more sympathetic attitude toward experimental science on the part of religious orders in western Europe. In recognizing that it can do justice to only one aspect of experience, that the human mind enters constitutively into the formulation of funda-

mental concepts, that its method is approximate and applicable only to series of phenomena and not to individuals, science, so it is said, has lost its materialist sting.

This summary sketch of some of the more important historical forms of materialism is sufficient to indicate that a variety of attitudes and motives has entered into its systematic construction. Undoubtedly the most recurrent motive behind the theoretical formulation of materialism has been the desire to win new spheres for human control from the obstructive influence of animistic, spiritualistic and religious thought. As a consequence most materialistic philosophies have been opposition movements. From Democritus to Karl Marx they have leveled their arguments against dominant systems of spiritualistic thought in which emphasis on immaterial entities and final causes have interfered with the discovery and control of the specific mechanisms of things. The ultimate impact of materialistic doctrine therefore has always been social and cultural. These social and cultural objectives have varied all the way from the desire to provide a more stable base for government than that derivable from religious authority to the desire to extend the sphere of economic activity in independence of the sanctions of church and state.

DIALECTICAL MATERIALISM is the philosophy sketched out in the philosophical writings of Marx and Engels, part of which has been published only recently following the revival of this philosophy as the official doctrine of Soviet Russia. Its chief textual sources are: Marx and Engels, *Die heilige Familie* (written 1844); Marx, economic and philosophical manuscripts written in 1844 (first published in *Gesamtausgabe*, pt. i, vol. iii), *Thesen über Feuerbach* (written 1845); Marx and Engels, *Die deutsche Ideologie* (written 1845-46); Engels, *Herrn Eugen Dührings Umwälzung der Wissenschaft* (1878), and *Dialektik und Natur* (first published 1927). The philosophy is by no means a completely worked out system; also because of its close union with the practise and needs of the international working class, interpretations of controversial points and elaboration of fragmentary indications are subject to revision. One may, however, attempt to expound the doctrine by means of its leading principles, including those stated as such in the writings of Marx and Engels and those which in the judgment of the writer would seem to be implied.

(1) *The principle of realism.* The existence of

any object does not depend upon its being perceived or experienced in any way. Although some characters of existence may depend upon the mode in which it is experienced, existence itself cannot be deduced from psychological or logical considerations alone. Time, space, causality and other fundamental categories can serve as organizing forms of consciousness only in so far as they express objective attributes of matter. Dialectical materialism consequently lines itself up with the great realistic tradition in western thought according to which will, knowledge and activity depend for their effectiveness upon certain structural features of the situation in which they function.

(2) *The principle of dialectic.* As the name indicates, dialectical materialism took over the dialectical interpretation of reality developed by Hegel. The term dialectic as originally used in Greece meant the process of getting at the truth through a debate carried on by opposing sides. For Hegel as for some of the other post-Kantian philosophers the movement of experience itself represents a sort of logical debate carried on by reality, with a logical thesis being opposed by the logical antithesis and yielding thereby an endless movement toward a higher synthesis. The ultimate goal of the Hegelian dialectical process is God, or the pure spirit freed from its self-alienation in matter, and it is this goal and its implications that are rejected by Marx and Engels at the moment that they retain dialectic as an interpretation of the process of reality. The extent of the debt of dialectical materialism to the Hegelian philosophy and its divergence from it may best be indicated in Marx' own words. In the preface to the second edition of *Das Kapital* he writes: "My dialectic method is not only different from the Hegelian, but is its direct opposite. To Hegel, the life-process of the human brain, i.e. the process of thinking, which, under the name of 'the Idea,' he even transforms into an independent subject, is the demiurgos of the real world, and the real world is only the external, phenomenal form of 'the Idea.' With me, on the contrary, the ideal is nothing else than the material world reflected by the human mind, and translated into forms of thought. The mystifying side of Hegelian dialectic I criticized nearly thirty years ago . . . [but] the mystification which dialectic suffers in Hegel's hands by no means prevents him from being the first to present its general form of working in a comprehensive and conscious manner. With him it is standing on its head. It must be turned right side up again, if

you would discover the rational kernel within the mystical shell."

(3) *The principle of determinism.* Although there are chance elements in the world, the methodological assumption of science presupposes that all objects of inquiry in different fields are subject to law. There can be no dispute about this, and where there is dispute the real problem is whether some subject matter can be treated scientifically. Dialectical materialism holds that no limits can be drawn to the progress of science and although many things will probably remain unknown none of them is inherently unknowable. Engels in his *Feuerbach* makes short shrift of Kant's *Ding an Sich*, which like Spencer's Unknowable conditions experience but is never known. He repeats Hegel's argument that the nature of a thing is not some mysterious x but the sum total of all its qualities or the synoptic formula which unifies its appearances from all possible points of view.

(4) *The principle of emergence.* Mechanism is the simplest but not the sole expression of determinism. This is clear from the very phenomena of growth and development, with which dialectical development is so vitally concerned. Growth and development involve diversification; mechanical law merely asserts, however, that like causes give like effects. Another principle must therefore be introduced to account for the palpable facts of variation and evolution. This is the principle of emergent qualities. It states that differences in quantity ultimately give rise to differences in quality and that the relations between the qualities cannot be reduced to or deduced from the quantitative relations which define the initial series. In the course of time and on one level after another there arise new groups of qualities and patterns of behavior. Types of laws are discovered which hold for limited domains and which in turn condition but do not determine the development of other laws. Thus the laws of physics hold for all things inanimate or living; but the laws of biology, although they rest upon the laws of physics, are distinct and cannot be deduced from them. Similarly the laws of biology hold for all living things human or non-human, but the laws of human psychology, although they rest upon the laws of biology, cannot be deduced from them. The recognition that the laws of mechanics, biology and other sciences contain unique qualitative elements whose analysis demands special explanatory categories is the great differentiating mark between "vulgar" and dialectical materialism. On this issue

dialectical materialism parallels the positions taken by the philosophies of emergent evolution and emergent naturalism in England and the United States.

In Russia today this emphasis upon the specific and qualitatively unique aspect of each situation has produced a rift in the school of the dialectical materialists. Those who seek to explain situations under the broad formal laws of physical or social behavior (depending on the realm in which the phenomena fall) are accused of being monistic mechanists. It is said that in their attempts to operate with general principles they overlook the Hegelian insight that principles are modified in every particular application. They are also charged with disregarding Engels' dictum that independently of the specific expressions in which it is always found matter as such is a pure mental construction or abstraction. On the other hand, those who are called mechanists dub their opponents idealists and claim that besides multiplying entities without necessity they are themselves guilty of trying to destroy individuality by reducing it to a complex of relations. They contend that the opposing faction of the dialectical materialists has fallen victim to a too sympathetic study of the Hegelian logic, which is reflected in their tendency to regard matter in its different forms as a precipitate out of types of logical relations of varying complexity.

(5) *The principle of temporalism.* Marx was peculiarly sensitive to the omnipresent facts of change. And since for him time was the objective measure of change, his philosophy of dialectical materialism has been regarded, not without justice, as a variety of critical historicism or temporalism. Not only are the objects of judgment continually taking on new characters and qualities, but ideas and judgments themselves possess implied time coefficients. Indeed Marx goes so far as to assert in his *La misère de la philosophie* that "ideas and categories are not more eternal than the relations which they express. They are historical and transitory products." It is important to remember, however, that the reference here is to social relations, which change more rapidly than physical and less rapidly than psychological relations. For to maintain that everything changes at the same rate would be equivalent logically to saying that everything is at rest. Consequently the principle of temporalism reenforces the principle of emergence by distinguishing between the different kinds of historically enduring entities.

(6) *The principle of interaction.* The activistic

impact of Marx' thought led him to two problems which had baffled all previous philosophers of materialism. The first was to account for the effective character of individual consciousness, which had been treated by early materialists as a mere chemical product of the body; the second was to explain the transformative character of class consciousness, which is so integral a part of any social philosophy that proclaims the virtues of revolutionary mass action. The crucial importance of these problems comes to light in the terrific struggle which Lenin waged against the doctrine of "spontaneity" from 1902 (in *Chto delat?* tr. as *What Is to Be Done?* in vol. iv of his *Collected Works*, 1927) down to 1922, a struggle which caused him to be termed a heretic and idealist by the more orthodox sections of the German Social Democratic party. Marx meets the first problem in his dialectical theory of perception. In his first and fourth glosses on Feuerbach he stresses the fact that sense perception is not a form of knowledge but a practical sensory activity by which the organism adjusts itself to external stimuli. Out of the interactive process of adjustment knowledge is born. Knowing is not a passive reflection or image of some fully formed antecedent existence but a method of acting upon that existence. Its import consequently is practical, not in the narrow sense of utility but in the sense that it involves a method of handling material instead of merely contemplating it. The second problem finds its solution in Marx' conception of class consciousness as the carrier of historical forces. Class activity is the mode by which the socially determined comes to pass. But only that activity can be effective which on the basis of social needs projects ideals and exercises itself on their behalf. In this activity the victorious class leads events; it does not slavishly wait and follow them. "The materialistic doctrine that men are the products of conditions and education . . .," Marx reminds Feuerbach, "forgets that circumstances may be altered by men and the educator has himself to be educated."

(7) *The principle of biological materialism.* Marx was one of the earliest disciples of Charles Darwin. But he vigorously contested the attempts made by the Social Democrats to bring over into sociology the concepts of the struggle for existence and the survival of the fittest. Such attempts were, in his eyes, nothing else than Calvinism in modern dress. None the less, in letters to Engels, Lassalle and Kugelmann he hailed Darwin's work as providing the natural-

istic foundations of the philosophy of dialectical materialism. This meant that all human attributes were to be taken as continuous with biological tendencies already present in lower forms; that thinking especially was to be regarded as a natural event; that all forms of dualism were to be shown to be distortions of the results of the evolutionary process; that fixed natural forms and external teleology were to be finally banished from science; and that all cultural life, although quite distinct from organic biological tendencies, necessarily presupposes the existence of these biological tendencies as a necessary condition. Together with Engels he suggests that there is no purely biological behavior—that certain changes in man, as, for example, changes in stature, may be culturally conditioned. He accepts Hegel's position in the *Phänomenologie* that even sense perception, not merely the contents of perception but the way of perceiving and the meanings disclosed in the act of perceiving, is as much a cultural as a psychological phenomenon.

(8) *The principle of historical materialism.* Dialectical materialism applied to the realm of culture, that is, to the field delimited by the common activity of men as *members of society*, gives us the principle of historical materialism. This is the hypothesis that, in the words of Engels, "the causes of all social changes and political revolutions are to be sought, not in men's brains, not in Man's better insight into eternal truth and justice but in changes in the modes of production and exchange. They are to be sought not in the philosophy but in the economics of each particular epoch."

(9) *Social interpretation of categories.* A further extension of the principle of historical materialism is involved in the attempt, already begun by Marx and Engels, to offer a social interpretation of common sense categories. The starting point of this type of investigation is the belief that occupational activities determine the fundamental modes of social behavior and that in this behavior are formed ideas, attitudes and habits which express themselves in other fields of culture. There arises a whole schedule of desires, values and criteria of satisfaction and validity which dominate the interpretation of social and natural experience. Philosophies of life sum up in technical and poetic idiom the appearance of the world from the varying perspective of different economies.

(10) *The principle of practise (Praxis).* Of all the principles of the philosophy of dialectical

materialism the most fundamental is the indissoluble unity of theory and practise. From this principle practically all the other principles of Marx' method may be derived. For Marx theory arises as a general method of meeting the specific problems of man, nature and history. The existence of the world as a whole is not an intelligible problem, just as the question "Why does anything exist and not nothing?" (Schelling) is not an intelligent question. A theory has meaning only in so far as it gives us a leverage in something concrete which bears upon the solution of a problem. The series of such concrete effects is all that can be discussed when the validity of a theory is in question. A theory is true in so far as it enables us to settle the concrete difficulties out of which these problems have arisen. A theory which does not ultimately indicate something to be done, which does not make a difference to a situation which it calls forth, is a form of verbal behavior which at best can have only aesthetic value. Failure to realize that practise is the life of theory and theory the guide to practise is responsible for all the futile questions about the possibility of knowledge which have vexed mankind, and at different times has resulted in mechanism, resignation, barren formalism, skepticism and other attitudes hostile to intelligent control of the physical and social environment. In his second gloss against Feuerbach Marx trenchantly observes: "The question whether human thought can arrive at objective truth is not a question of theory but a practical question (*Praxis*). In practice, man must prove the truth, i.e., the reality, power and this-sidedness of thought. The dispute as to the reality or unreality of thought which is separated from practice is a purely scholastic question." From this it follows that Marx' own ideas must be tested in action and that, more specifically, his theory of history is a method of making history, his economic analysis is a guide to economic action, his reflections on human behavior are clues to controlling behavior. Only after such experimental activity has been performed are we even in a position to say that his ideas were valid because they conformed to the structure of the antecedent situation. For what does it mean to say that an idea conforms to a situation? Taken literally no idea could ever change a situation if it merely conformed to it or duplicated it. An idea conforms to a situation when as a result of acting on it we produce changes in the situation which fulfil the needs out of which the problem arose. For quite literally human needs are part of the

total situation. The denial of activity as the test of truth involves the abandonment of dialectical materialism. The acceptance of the critical nature of informed activity in all thinking makes dialectical materialism self-critical, for it offers it a way of developing itself in the face of new conditions. Engels was fond of saying, whenever the validity of historical materialism was discussed, that "the proof of the pudding is in the eating"; and he would often quote Faust's *Im Anfang war die That* as the beginning of philosophical wisdom. It would be no exaggeration to maintain that the future of dialectical materialism depends on how seriously his words are taken.

HISTORICAL MATERIALISM is the doctrine, given authoritative expression by Karl Marx and Friedrich Engels, that "the mode of production determines the character of the social, political, and intellectual life generally." Although practically all of the work of Marx and Engels dealing with economics and culture may be regarded as a working out of this theory, the writings that are of special importance for an understanding of historical materialism are the following: Marx, *Zur Kritik der Hegel'schen Rechts-Philosophie* (1844), and economic and philosophic manuscripts written in 1844 (first published in *Gesamtausgabe*, pt. i, vol. iii); Marx and Engels, *Die heilige Familie* (written 1844), and *Die deutsche Ideologie* (written 1845-46); Marx, *La misère de la philosophie* (1847), and *Zur Kritik der politischen Ökonomie* (1859); and Engels, *Vier Briefe über den historischen Materialismus* (1890, 1893-94).

As its name suggests, historical materialism differs from all other materialistic interpretations of history in refusing to explain the rise and fall of social systems as an effect of factors which are non-social. Admitting that climate, topography, soil, race, are genuine conditioning factors of social and historical activity it denies that they determine the general character of a culture or its development. The reason is twofold: first, in any given area these factors are relatively constant while social life is more variable; second, there can be no intelligible reduction of the specific qualities of human behavior—exhibited in a social context—to categories of physics and biology. The attempts recently made, especially by Ellsworth Huntington, to recast the geographical interpretation of history suggested by Herder and Montesquieu and more explicitly stated by Buckle in order to show that changes in civilization can be correlated with climatic pulsations and the shifting of climatic zones do not

escape the difficulties which Hegel had already pointed out. Not the slightest evidence has been produced, for example, to show that the climate of Greece from the sixth century B.C. to the first—a period of tremendous social change—varied in any appreciable way.

Historical materialism differs from all other theories which attempt to do justice to the relative autonomy of social phenomena by virtue of the scientific character which it claims for itself; i.e. by its quest for controlling or determining mechanisms. While other theories which seek to discover controlling conditions fail to do justice to the historical character of culture, those theories which have a strong sense for the historical factor, notably idealistic social philosophies of the Christian and Hegelian varieties, fail to indicate the specific mechanisms of social change. Historical materialism rules out idealistic social interpretations by showing that the acceptance and often the genesis of ideas depend upon something which is not an idea, and that ideas themselves when they function as instrumental agencies in a social environment are indirect and sublimated expressions of class interests.

The positive principles underlying the theory of historical materialism may be summed up as follows: (1) Every existing culture is a structurally interrelated whole. Consequently any aspect of that whole—its legal code, educational practises, religion, art or the like—cannot be understood by itself. It must be taken within the context of the system of social energies in which it functions. An analysis of law or a history of law demands more than a mere treatment of legal ideas and their formal interrelation. It was the realization of the organic character of culture and its morphologically determined structure which suggested to Marx his real problem: what factor determines the general style or form of a historical culture? Marx himself in sketching his own intellectual history tells us that as early as 1844 in the course of a revision of Hegel's philosophy of law he had come to the conclusion "that legal relations as well as the forms of the state could neither be understood by themselves nor explained by the so-called general progress of the human mind" (*Introduction to Critique of Political Economy*).

(2) Culture is not only an interrelated whole but a developing whole. The independent variable in the developing social whole will be the explanatory key not only to the causes of change from one society to another but to the

dominant culture pattern existing at any time. According to historical materialism the independent variable is the mode of economic production. This differentiates historical materialism from non-mechanistic social idealism from Hegel down to the present. Hegel had maintained that "political history, forms of government, art, religion, and philosophy—one and all have the same common root, *the spirit of the time*." Marx, on the other hand, contended that all of these cultural phenomena are "rooted in the material conditions of life, which are summed up by Hegel after the fashion of the English and French of the 18th century under the name 'civic society'; the anatomy of that civic society is to be sought in political economy."

The view that the independent variable is the mode of economic production does not deny that the cultural products of economic development react upon that development. Engels' continued insistence upon the category of *Wechselwirkung* was occasioned by charges that historical materialism suffered from a primitive monism according to which all efficient causes in history were material, never ideal. In his letter to Starkenberg (January 25; 1894) Engels writes: "The political, legal, philosophical, literary, and artistic development rest on the economic. But they all react upon one another and upon the economic base. It is not the case that the economic situation is the *sole active cause* and everything else is merely a passive effect. Rather is there a reciprocity within a field of economic necessity which *in the last instance* always asserts itself" ("*Wechselwirkung auf Grundlage der in letzter Instanz stets sich durchsetzenden ökonomischen Notwendigkeit*").

Similarly, historical materialism does not deny the role played by social tradition in modifying the rate of change in the non-material aspects of culture. "The tradition of all dead generations," Marx writes in the *18th Brumaire*, "weighs like a nightmare on the brain of the living." Family relationships, religion, art and philosophy, although they reflect the new social equilibrium produced by changes in the economic order, lag behind both in time and structural form. From the vantage point of a long time perspective the phenomena of cultural lag may not appear significant, but from the point of view of short scale political operation they are of great importance.

(3) By the economic structure of society historical materialists mean "the sum total of the relations of production." The relations of pro-

duction (involving the material powers of production, of which natural raw materials, inventions, existing skills, techniques and knowledge are a part) constitute the real foundation of the whole cultural complex. Historical materialism must therefore be differentiated from the technological interpretation of history, or economic determinism. By the "relations of production" Marx means not the mechanical agencies used in manufacture or the technical organization of the factory but the social relations into which human beings enter or, better still, find themselves whenever they participate in the economic life of society. Property relations are the formal expressions or signs of these social relations of production. These in turn constitute a whole of which technique is only one of the parts. "Machinery," Marx argues, "is no more an economic category than is the ox which draws the plow. Machinery is only a productive force." Indeed it is possible to find societies with different social relations but certain identical productive forces: techniques of tilling the soil were sometimes the same in feudal economies as in slave economies; the use of machinery in the Soviet Union parallels that in the United States. More important still is the assertion of the historical materialist that the very development of technique is not independent but is guided by the needs of a larger social productive whole, of which it is a part. The direction taken today by technical invention, for example, as well as the question whether the invention is to be utilized or scrapped is normally decided not by the spirit of the inventor or the rationale of his creation but by the likelihood of its directly or indirectly diminishing production costs or increasing profits.

(4) The mode of economic production is expressed in certain social relationships which are independent of any individual. Man is born into a society in which property relations have already taken form. These property relations define the different social classes, such as feudal lord and serf, employer and employee. The conflicting interests of these classes flow not merely from the consciousness or lack of it of individual antagonisms but from the different objective roles played by them in the processes of production. The absence of class conflicts, which may often be the consequence of the activity of professional social pacifiers, no more eliminates the real opposition of class interests than the willingness of Negro slaves to serve their masters proves that they were not enslaved.

It is the emphasis on social relations and class

interests that differentiates historical materialism from those doctrines which seek to explain social processes in terms of individual economic self-interest. Marx attacks Stirner in the *Deutsche Ideologie* and Bentham in *Das Kapital* precisely because they conceived man on the pattern of an egoistic and self-centered petty bourgeois shop-keeper who keeps a profit and loss account of his feelings and whose every act is determined by calculation of exclusive, personal gain. The motives which guide individual men are quite various. A member of the working class who voluntarily enlists to fight for his country cannot by the wildest stretch of the imagination be regarded as necessarily actuated by self-interest. The historical materialist is not concerned with individual motives as such. His problem is to explain why certain social ideals prevail at one period rather than at another and to discover what factors determine the succession of ideals for which men live and die. That economic conditions and economic self-interest are two distinct things may be simply demonstrated by showing that the very existence and intensity of egoism as well as the rise of philosophies of self-interest are functions of specific economic conditions.

(5) The division of society into classes gives rise to different ideologies—political, ethical, religious and philosophical—which express existing class relationships and tend either to consolidate or to undermine the power and authority of the dominant class. A struggle for survival goes on in the realm of ideas. Since those who control the means of production also control directly or indirectly the means of publication—the church, press, school—the prevailing ideology is a buttress to the existing order. "In every epoch," writes Marx, "the ruling ideas have been the ideas of the ruling class."

(6) In every social order there is a continuous change in the material forces of production. Sometimes, as in early societies, this change is produced by some natural phenomenon, such as the desiccation of rivers or exhaustion of the soil. Usually, however, and especially under capitalism this change is produced by a development in the instruments of production. At a certain point in their development the changed relations in the forces of production come into conflict with existing property relations. It no longer becomes possible on the basis of the existing methods of distribution of income to permit the productive processes to function to full capacity. Property relations are now recognized

as a fetter upon further social development. The class that stands to gain by the modification of property relations becomes revolutionary. It asserts itself as a political force and develops a revolutionary ideology to aid it in its struggle for state power. Sometimes it masks its class interests in the guise of slogans of universal appeal, as did the French bourgeoisie in the eighteenth century; but at all times its doctrines are patterns of social action and function instrumentally in preserving or overthrowing the status quo. One of the most important tasks of historical materialism is the criticism of cultural and social doctrines in order to discover their social roots and presuppositions, their avowed class values and allegiances and the social direction taken by practical activity in their behalf.

(7) Viewed in the light of contemporary processes all history since the disappearance of primitive communism may be regarded as a history of class struggles. Every class struggle is a political struggle; for the state is an organ of class repression and is never really neutral in class conflict. Every ideal struggle in so far as it bears upon the class struggle has political repercussions and may be evaluated from a political point of view without prejudice to its own specific categories.

(8) The struggle between capitalist and proletariat represents the last historic form of social opposition, for in that struggle it is no longer a question of which class should enjoy ownership of the instruments of production but of the very existence of private ownership. The abolition of private property in the means of production means the abolition of all classes. This can be accomplished only by a victory of the proletariat. Political power is to be consolidated in a transitional period of revolutionary dictatorship, after which the state dies out; i.e. its repressive functions disappear and its administrative functions become part and parcel of the productive process.

Several important problems still await solution at the hands of historical materialists. Chief among them are: (1) What are the specific mechanisms by which economic conditions influence the habits and motives of classes, granted that individuals are actuated by motives that are not always a function of the individual self-interest? Since classes are composed of individuals, how are class interests furthered by the non-economic motives of individuals? The attempt of Dietzgen to solve this problem must be regarded as a failure. Marx makes some suggestions which

point in the direction of an objective socio-behavioristic psychology. (2) The statement that economic conditions "in the last instance" determine social life or that they are "the real foundations" of society implies a theory of measurement. So far, however, no theory of measurement for the social disciplines has been evolved. That their explanatory categories and units of measurements must be different from those of the physical sciences seems clear. But this alone is not sufficient. (3) If it is true as Marx states in *Das Kapital* that in changing his external environment man changes his own nature, then human nature under ancient slavery must have been different in some respects from human nature under modern capitalism. But if this is so, how is it possible to understand past historical experience in the same way as we understand present experience, since understanding presupposes an invariant explanatory pattern? That is a problem which confronts not only historical materialism but all philosophies of history; this is, however, no valid reason for avoiding it. (4) To what extent are chance events to be admitted as operating forces in history? Most historical materialists have contended, like Pokrovsky, that "to appeal to chance in history is to exhibit a certificate of poverty." Both Marx and Engels were more cautious. In a letter to Kugelmann on the Paris Commune (April 17, 1871) Marx goes so far as to claim that for some specific and local issues chance may be a decisive factor. Engels with his eye on long range tendencies admits the presence of chance phenomena but holds that their influence is compensatory, with the result that in the final account they cancel one another. The difficulty with the question of chance seems to be that a great many critics as well as disciples of Marx define chance events as absolutely uncaused events instead of events that are historically irrelevant. From the point of view of the historian only those are chance events which he cannot draw within the circle of his social explanation, although each of those events may be strictly determined from other points of view. If one denies the existence of even relative chance in history, then historical materialism becomes a variant of either one of two doctrines: a degenerate Hegelian idealism whose organic determinism implies that if anything had been different, everything would have been different; or a fatalistic mechanism which holds that there is no genuine novelty in the world and that future social changes are already predetermined by the atomic configurations of the primordial slime.

(5) Is the truth of historical materialism itself historically conditioned or is it valid for all history, past and present? Both Marx and Engels declared that its truth was relative only for class societies and that consciousness of the conditions of its truth would lead to action which would abolish class society. Does this mean that "the leap from the kingdom of necessity to that of freedom," the phrase with which Engels describes communism in *Anti-Dühring*, implies a paradise in which man escapes the limitations of his earthly fate? There is no warrant for the belief that historical materialism justifies any such historical apocalypse. The freedom of which Engels speaks is the freedom of man to make his own social history on the basis of the natural necessities always present. That he will be in a position to make history at all will find its explanation in some form of materialism; but the kind of history he will choose to make out of the many possibilities which are given will be irreducibly and uniquely an expression of his own nature.

SIDNEY HOOK

See: PHILOSOPHY; LOGIC; NATURALISM; REALISM; ETHICS; SOCIALISM; IDEALISM; MECHANISM AND VITALISM; ORGANISM, SOCIAL.

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MATERIALISTIC INTERPRETATION OF HISTORY. *See* MATERIALISM.

MATERNITY WELFARE. Public interest in maternity welfare as expressed in directed efforts to reduce the number of deaths in childbirth and to preserve the health of mothers is a development of relatively modern civilization. Among primitive peoples death has been for the most part regarded with fatalism; and the tabus and special provisions associated with pregnancy, such as abstinence from particular activities, prohibition of certain foods and temporary isolation before or after childbirth, have been concerned with supposed evil effects on the child or on the community and only incidentally with the health of the mother. Greek and Roman literature afford evidence that in classic times midwives commonly attended women during confinement and that physicians were summoned in abnormal cases. During the Middle Ages the care of parturient women was negligible because of the decline of midwifery and obstetrics, the low state of any form of provision for general public health and the fact that the early Christians were interested more in the welfare of the child than in that of the mother. The earliest recorded instances of organized efforts at maternity welfare work date from the thirteenth century: in Rome Jewish societies for the relief of the poor in the ghetto provided assistance for maternity cases, and in the German town of Pfullendorf free hospital confinement was offered to women without means. Public midwives were employed by the cities of Nuremberg and Frankfort in the fourteenth and fifteenth centuries and soon thereafter by other European cities. In the eighteenth century Denmark provided for state training and licensing of midwives, while in Paris and in Turin private charities assisted poor mothers.

With the industrial revolution and its effects upon the working and living conditions of the masses the problem of maternity welfare became intensified, and emphasis shifted from the personal to the collective. The increasingly widespread employment of women and the absence of legislation restricting hours of employment, types of work or sanitary conditions exacted a costly toll in the form of mounting death and morbidity rates for both mothers and children. Widespread interest in all phases of maternity welfare—medical, economic and social—was not aroused, however, until the second half of the nineteenth century with the general awakening

of social consciousness, the beginnings of factory legislation and to some extent the simultaneous rise of the woman's movement, especially in continental Europe, where it emphasized the problems of proletarian and unmarried mothers.

Equally significant in reducing the hazards of childbirth was the progress in the nineteenth century in the field of preventive medicine and of public health work. In the 1840's the Hungarian Ignaz Semmelweiss made the important discovery (coincidentally with the American Oliver Wendell Holmes) that the highly contagious puerperal septicaemia (childbed fever) could be prevented by adequate sanitation; and the adoption of such measures in the Vienna General Hospital resulted in a drop in the maternal mortality rate due to this cause from 9.9 to 3.8 within one year and to 1.3 in the following year. The significance of improved sanitation is evidenced by the fact that even today puerperal septicaemia accounts for from 40 to 75 percent of all deaths in childbirth. For the United States the figure for deaths from septicaemia is 40 percent of the total; the toxæmias of pregnancy (albuminuria and convulsions) cause an additional 25 percent and of the remaining 35 percent the largest proportion is traceable to the so-called accidents of pregnancy.

Up to the period of the World War there was a steady decrease in the maternal mortality rate in most countries, but in the post-war period economic impoverishment and loss of physical vitality have in many countries resulted in an increase in the death rate, as is shown in Table 1. On the other hand, actual state provision for organized maternity protection is a post-war development in most countries. In general the scope of such protection has lagged behind that for children despite the obviously adverse effects of maternal mortality and morbidity on child welfare.

The following table is based on statistics of countries with comparable methods of estimating maternal mortality. No comparison of international mortality rates can be altogether free from error, although ostensibly the international rules for allocating various causes of death may have been followed in every country listed. To a certain extent the increase in some countries, as in the United States, can be attributed in part to an extension of the registration area, to inclusion of cases excluded by other countries and also to greater accuracy in the records.

This table does not include statistics for France, Germany and Russia. An earlier study

TABLE I

MATERNAL MORTALITY: DEATHS FROM CAUSES ASSOCIATED WITH PREGNANCY AND CHILDBIRTH PER 10,000 LIVE BIRTHS

COUNTRY	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929
Australia	43	53	56	47	47	50	47	55	51	55	56	53	59	60	
Belgium					72	60	57	53	56	58	50	61	57		
Canada							51	55	54	60	56	57	56	56*	
Chile	66	73	72	82	88	75	79	80	74	61	61	58	58	59	
Denmark						24	20	20	26	23	24	26	31		
Finland		36	38	44	40	36	33	30	31	35	29	32	30*		
Hungary		42	40	52	29	32	29	30	28	31	29	32	30	34	
Irish Free State	53	57	49	48	47	49	50	57	48	48	47	49	45	49	
Italy	22	27	30	37	29	28	26	25	27	32	28	26	26	28	
Japan	36	35	35	38	33	35	36	33	34	31	30	27	28	28	
Netherlands				29	33	24	23	25	23	24	26	29	29	34	33*
New Zealand	47	59	60	52*	51	65	51	51	51	56	47	42	49	49	48
Norway	27	28	30	30	34	26	22	25	28	29	27	32	25		
Sweden	29	27	25	26	32	27	27	25	23	24	26	29			
Switzerland		54	56	51	57	56	55	51	46	48	43	44	37	44	46
United Kingdom															
England and Wales	42	41	39	38	44	43	39	38	38	39	41	41	41	44	43
Northern Ireland	56	59	51	47	46	69	52	47	49	45	44	56	48	52	
Scotland	61	57	59	70	62	62	64	66	64	58	62	64	64	70	69
United States															
Expanding Birth															
Registration Area†	61	62	66	97	74	80	68	66	67	66	65	66	65	69	70
Birth Registration															
Area of 1915	61	62	63	89	68	76	65	62	64	62	62	62	63	61	
Uruguay	22	29	32	30	23	34	33	27	27	25	25	30*	22*	24	

* Provisional.

† This area, which in 1915 included 10 states, included 46 in 1929.

Source: White House Conference on Child Health and Protection, *Obstetric Education*, Section I, Committee B, Subcommittee on Obstetric Teaching and Education, Report (New York 1932) p. 197. Figures for United States 1915 registration area compiled from annual mortality statistics of the United States Bureau of the Census.

by the United States Children's Bureau gives the mortality rate per 10,000 live births for France as 53 (1905-09), 49 (1910-14) and 66 (1915-16); for Germany as 34 (1901-04), 33 (1905-09), 35 (1910-14) and 46 (1915-19). Official German statistics based on all births disclose the following trend from 1920 to 1930 as: 48, 48, 49, 50, 51, 48, 48, 51, 53.5, 53.6 and 52, showing the steady increase in the death rate.

Since puerperal septicaemia causes so large a percentage of deaths and is most amenable to control, the figures for its incidence are of special interest. The most complete set of statistics available are those for England and Wales, which show a steady decline from a rate of 30 in 1882 to 13 in 1923, with, however, a slight rise since that time, until in 1925-27 it reaches the figure of 16 per 10,000 live births. Germany's rate, which in 1900 was 14, the lowest on record except that of the Netherlands with 8 and Italy with 9, doubled in the post-war period and began to decline only in 1928. In Sweden and Denmark the rate fell from 14.3 and 17 respectively at the beginning of the century to 9 in 1924, rising only slightly thereafter. The highest rate is that of Belgium with 30 in 1926, the

lowest that of its immediate neighbor, the Netherlands.

These figures only rarely show the number of deaths due to miscarriages and abortions. Deaths due to criminal abortion are of course unrecorded. Nor is there any way of tracing later deaths due to these causes. Finally, there is no record of maternal morbidity. It has been estimated, however, for England and Wales that for every woman who dies in childbirth twenty suffer injuries to their health.

Various explanations are offered to account for the marked differences between countries in maternal mortality rates. Such factors as race, adaptation to environment, differences in physique, distribution, degree of urbanization, occupation, food habits and modes of living are of course significant. No less important are age distribution, prevailing marriage age, the number of first births and, since fatalities are high in the group below 20 years of age and over 40, the age at which births occur. From the point of view of social control it is relevant to inquire into the prevalence of syphilitic infection and the proportion of illegitimate births, in which the incidence of first births and of syphilitic

infection is likely to be high and in which the maternal death rate is often twice as high as that among married mothers. According to Sir Arthur Newsholme the great variations are to be accounted for chiefly by the differences in care, which he calls the "management of parturient women." This involves first adequate medical supervision before confinement, at delivery and after birth. Such supervision requires increased attention in medical education to the practise of obstetrics, the provision of trained and licensed midwife nurses and obstetrical service for both rural and urban areas, maternity and infant centers offering advice and treatment to expectant and nursing mothers, maternity hospitals or maternity wards in general hospitals for abnormal cases and the availability of all these services for the family with limited means. Directly related to such a program is the control of venereal infection; this would include the enactment of marriage laws, such as that of the state of Wisconsin, making physical examinations and certification of freedom from disease compulsory before marriage. The spread of knowledge concerning the use of contraceptives is also important. Finally, the state not only should supply the elementary needs but should provide also health insurance specifically covering maternity benefits; moreover its labor code should regulate hours, types of employment and leaves of absence for working mothers.

It is interesting to note the prevalence of high insurance rates for married women in most countries. In Germany in the pre-war period insurance companies offering sick benefit schemes were unwilling to accept women members because of their higher sickness rate. In France mutual aid societies have frequently specified that confinement could not be regarded as a sickness and did not entitle women members to benefits. To overcome this objection it has become customary for the state, either federal or provincial, to grant special subsidies which pay sickness benefits in confinement cases.

A survey of the European countries in which mortality rates are very low—the Scandinavian countries, Holland and Italy—shows that these states have the fullest and most coordinated provisions for all types of assistance. In the Scandinavian countries, which are predominantly rural, where the general food habits are good and public sanitation and personal cleanliness are on a high level, the physique of the women is excellent and pelvic disorders are rare. On the other hand, in these as in other continental

countries the rate of illegitimacy is very high. In Holland, although the density per square mile and the urbanization are almost as great as in England and Wales, where a far higher maternal mortality rate prevails, town planning and reconstruction constitute an integral part of municipal programs, as they do in the Scandinavian countries. Students of the situation in these countries, which have served as models for maternity welfare programs elsewhere, attribute the lower death rate not only to these causes but also to the fact that midwives, who attend over half of the deliveries, are subject to licensing and receive a training of from one to three years in state schools. They are paid in whole or in part out of the public budget, which provides a midwife for each community, and their services are free to all who cannot afford to pay. They receive benefits in case of sickness, are required to retire at a certain age and are forbidden to handle abnormal or unusual cases, which are immediately referred to hospitals. Moreover midwife service may be supplemented by that of district medical officers. Equally careful provisions are made for special obstetrical education of the physician.

Laws for the protection of women in industrial employment require sick leaves varying from four weeks after childbirth in Denmark to twelve weeks with full pay in Holland; special maternity benefits are provided by the state or, under the schemes of contributory health insurance, hospitalization and extended benefits. Everywhere the system is well coordinated, although arrangements for prenatal care vary, being perhaps most advanced in Holland.

Italy has recently established compulsory maternity insurance and provided midwives for urban health centers, health visitors in rural districts, traveling health centers and demonstration clinics; courses in prenatal and postnatal care for physicians, midwives and the laity, in which private contributions supplement public provision, have also been initiated.

The earliest German legislation concerned with maternity protection was enacted in 1878, when three months' leave after confinement was made compulsory in certain industries. The sickness insurance act of 1883 provided for the payment of maternity benefits at the same rate as those for ordinary illness. Since then an extensive system of legislative protection for maternity has been developed, including mothers' pensions, maternity insurance and sick leave during confinement. An act of 1927 stipulates

that all women wage earners in industry are entitled to at least twelve weeks' sick leave during pregnancy with guaranty of maintenance in employment, and regular nursing periods upon their return to work; under the Federal Insurance Act of 1929 women in agriculture and domestic service were also included. All employed women whose wages did not exceed 3500 marks were thus covered. Medical attention and sickness benefits are provided before and after confinement. Indigent women who are not entitled to insurance benefits are cared for by public relief. In view of this legislation the increasing mortality rate of Germany is most surprising; it can be explained in part by widespread unemployment and laxity in the administration of legislation. In Berlin the rate for 1926 was as high as 64 per 10,000 births; illegitimacy reached 19 percent, while abortion accounted for 75 percent of the deaths. Moreover there was inadequate midwife training and public services were not well coordinated. Although midwives attend 90 percent of the births in Prussia they have been underpaid and there has been no provision for adequate training or public employment.

In France maternity benefits are paid to women without means, whether or not they are regularly employed, for at least twelve weeks after childbirth. The funds are supplied jointly by the state, departments and communes. If the mother nurses her child she receives a nursing benefit for a period not exceeding one year. In addition medical attendance and drugs are supplied during pregnancy and for six months after confinement. The cost of this service is shared by the state and the individual under the system of social insurance.

Probably the most comprehensive welfare scheme in any country is that outlined by the Institute for the Protection of Motherhood and Childhood in Soviet Russia, which in 1927 expended 108,000,000 rubles for various forms of maternity service. Among the important aspects of its program are a widespread system of factory crèches for the care of the infants and children of working mothers, adequate daily nursing periods during hours of employment for all women with infants, the establishment of hostels where women may be cared for two months preceding and two months following childbirth, medical consultation centers for pregnant women and those with babies and the foundation of lying-in hospitals. The total number of institutes designed to protect motherhood rose from 27 in

1917 to 2539 in 1927. One unusual feature of the Soviet program is the provision of judicial consulting centers where women, whether married or single, may learn from qualified legal advisers how best to safeguard their rights. Because of the encouragement of birth control and the abolition of the status of illegitimacy the number of deaths from miscarriages and abortion has been greatly reduced during recent years. Over and above these services is the elaborate scheme of social insurance, which in 1927 paid 69,000,000 rubles to pregnant women in maternity benefits. The death rate per 10,000 births (including stillbirths) in Leningrad fell from 52 in 1923 to 35 in 1927.

Although England's maternity death rate is high it is far lower than that of other highly industrialized countries, such as Belgium, Scotland, Germany and the United States. In general, while recourse to midwives has increased on the continent, it has decreased in England. The Midwives Act of 1902 laid the foundation for safer and more effective practise by qualified midwives. Following the publication of letters from working class mothers a national program for the protection of maternity has been developed in the Ministry of Health. The Notification of Births Act in 1907 and its extension in 1915 made the registration of all births compulsory and brought a health visitor into the home to advise the mother in regard to her condition and that of her infant. In 1911 under the National Insurance Act a cash maternity benefit was introduced, as was the payment of sick funds during pregnancy and after confinement. Since 1918 there has been a nation wide supervision of pregnant women through the setting up of maternity and welfare clinics, the creation of facilities for the treatment of puerperal fever and for convalescence and the appointment of maternity nurses and municipal midwives. The first grant for maternity and child welfare, £56,809, was made in 1915; and with the Notification of Births Extension Act the Local Government Board offered subsidies for midwives' services, health visitors, obstetricians, welfare centers and hospital treatment. The Departmental Committee on Maternal Mortality and Morbidity in its 1932 report declared on the basis of several studies that at least 50 percent of maternal mortality is preventable and urged the establishment of a national maternity scheme under which the services of hospitals, clinics, specialists, practitioners and midwives would be coordinated.

Other portions of the British Empire have lagged behind England and Wales in their provision for maternity welfare. In Scotland the high degree of urbanization and the lack of coordination of services may in part account for the death rate, which is almost as high as in the United States. Canada's limited program and the problems presented by its widely scattered rural areas, the high degree of maternity mortality among the native races, especially in South Africa, as well as the difficulties involved in the formulation of a broad scheme to include both the white and the native populations make the problem of maternity protection in these lands somewhat similar to that of the United States. India is making an effort to formulate a program on the basis of the experience of New Zealand and Australia, where midwife and nursing service is provided by voluntary, semiphilanthropic organizations.

International recognition of the need for maternity protection dates from 1919, when the International Labor Conference proposed a legislative program dealing with the employment before and after childbirth of married and single women in industrial and commercial establishments; this scheme included a maternity leave of twelve weeks, six weeks before and six weeks after confinement, with maternity benefits, medical attendance and stipulated nursing periods. In 1921 these principles were extended to include women workers in agriculture. By August, 1932, eleven countries—Bulgaria, Chile, Cuba, Germany, Greece, Hungary, Latvia, Luxembourg, Rumania, Yugoslavia and Spain—had completely ratified these demands. More than twenty countries have arranged for maternity benefits under their compulsory sickness insurance laws. In others the general labor laws require abstention from work for stated periods and provide for a cash payment during that time. In some countries, however, especially in those of eastern Europe and South America, administration lags far behind legislation, while throughout central Europe the economic depression has made it impossible for governments to put the comprehensive programs into effect.

In contrast to the elaborate maternity welfare legislation of recent years in other countries the record of the United States is barren and inadequate, especially when its complicated social and racial composition, its vast area and high degree of industrialization and urbanization are taken into consideration. It has been said that in the United States more women of childbearing age

die in childbirth than from any other single cause except tuberculosis. The high mortality record, which by no means justifies public indifference, is in part explained, however, by the method of registration. According to Sir Arthur Newsholme, if England used the same method of certification its death toll would be increased almost 15 percent. If the records of the various states are considered, these vary for 1929 from the low record of 43 per 10,000 live births for Minnesota and 49 for Utah to the high rate for southern states, ranging from 90 for Arkansas to 114 for South Carolina. Ten states including New York range from 50 to 60, thirteen from 60 to 70, eight from 70 to 80, seven from 80 to 90 and six from 90 to 114. For cities maternal mortality varies from the low rate of Oakland, California, with 31; Jersey City with 45; Hartford, Connecticut, with 46, to the rate of the southern cities, in some cases almost as high as in certain regions of India. Thus Birmingham, Alabama, records 144 deaths per 10,000 live births; Nashville, Tennessee, 147; and Memphis, in the same state, 160. No specific conclusions can be drawn concerning agricultural and industrial states: New York has the low rate of 56, and Vermont the high rate of 77. Unfortunately no study has yet been made of the close relation between maternal mortality and family income.

In the case of the southern states the high mortality rate of the Negroes undoubtedly serves to increase the general rate. Table II shows that colored (predominantly Negro) mortality rates are almost double white maternal mortality rates, probably serving to increase the rates of northern cities with large Negro populations.

TABLE II
DEATH RATES BY COLOR (PER 10,000 LIVE BIRTHS)
FROM PUERPERAL CAUSES IN THE UNITED
STATES BIRTH REGISTRATION AREA*

YEAR	TOTAL	WHITE	COLOR [†]
1929	70	63	120
1928	69	63	121
1927	65	69	113
1926	66	62	107
1925	65	60	116
1924	66	61	118
1923	67	63	109
1922	66	63	107
1921	68	64	108
1920	80	76	128

* As in Table I this area is an expanding registration area.

† Includes a small percentage other than Negro.

Source: Compiled from United States, Bureau of the Census, Mortality Statistics, 1929 (1932).

The high mortality rate for the Negro population and the southern states is to be explained

in terms of poverty and of backwardness in health and social conditions, all aggravated by public indifference to Negro welfare. The higher incidence of illegitimacy in this population is another factor. Moreover, whereas in the country as a whole midwives—whose practise in the United States is entirely unregulated and subject to no requirements of training—attend only 15 percent of the births, over 87 percent of the 47,000 midwives are in eleven southern states.

Not only are midwives unlicensed and without special training, but there is no provision for specific obstetrical education for the general practitioner who is likely to be called on by the lower income classes. Less than a generation ago prenatal care was not taught in medical schools. There were probably more well organized *Frauenkliniken* in Germany sixty years ago than there are in the United States today. In 1929 the Council of Medical Education of the American Medical Association reported that of 1500 internes in approved teaching hospitals 334 graduates had had no experience in delivery, 235 had observed no deliveries, 200 had attended less than ten deliveries and only 70 had attended fifty or more.

There are in the United States no state systems of health insurance either voluntary or compulsory. Since the World War five states, Connecticut, Massachusetts, Missouri, New York and Washington, have prohibited the employment of pregnant women during certain periods, and even in these states there is neither guaranty of maintenance of position nor provision for maternity benefits. Federal effort has been limited to the creation of the Children's Bureau in 1912, which has done valuable educational work, and to the passage in 1921 of the Act for the Promotion of the Welfare and Hygiene of Maternity and Infancy known as the Sheppard-Towner Act. This act authorized an annual appropriation of \$1,240,000 for five years, extended in 1927 for two additional years, to be divided among the states accepting its provisions requiring the maintenance through legislative authority of a child hygiene or child welfare division in the state agency of health. At the expiration of the act forty-five states and Hawaii had accepted this provision and were carrying on a program of urban and rural maternity and child welfare devoted mainly to prenatal and postnatal instruction for mothers and to special courses for midwives, nurses and physicians. In 1931 an unsuccessful attempt was made to revive the act through a new bill, and

fewer than half of the states are carrying on the work to the same degree as in 1929.

Such advances as have been made are traceable for the most part to state public health departments and to the work of voluntary organizations. Seventeen states make no allowance for prenatal clinical services under their official public health agencies and fourteen out of sixty cities surveyed have no provision whatever, either public or private. Some states have set up educational services, using literature, the radio and the motion picture. A few have consultation clinics under the auspices of state boards of health; others have appointed regional consultants.

The American Public Health Association undertook a definite campaign for the protection of motherhood at the outset of the present century and in 1921 established a child hygiene section, which gives special attention to the problems of maternal and infant mortality. In 1925 the American Gynecological Society and the American Association of Obstetricians, Gynecologists and Abdominal Surgeons established a joint committee for maternal welfare to promote nation wide propaganda for better prenatal care, better obstetrical treatment and more rigid asepsis.

In the absence of adequate midwife service supplementary public health nursing systems have grown up in the United States largely under private auspices; such, for example, are the Henry Street Visiting Nurse Service and the Maternity Center Association, which operate in the congested slums of New York City, and the Frontier Nursing Service of Kentucky, which supplies trained midwives for rural areas where there are no resident physicians. In addition to midwifery service these nurses offer practical courses in public health, including maternity and infant welfare, and give prenatal and postnatal instruction. The effect of care and adequate service is evidenced in a study of the New York Maternity Center Association made with the cooperation of the statistical department of the Metropolitan Life Insurance Company. Of 4726 women cared for in the eight-year period from 1922 to 1929 (with some financial assistance from the Sheppard-Towner fund) not one woman under care died before delivery and only eleven died of puerperal infection within one month after delivery despite the fact that there were 123 stillbirths and 274 premature deliveries, of which 61 were miscarriages. The maternal mortality rate for this group per 10,000 live

births was 24 compared with the rate of 53 for all white women in New York City for 1922 to 1926 and of 62 for mothers not cared for in the district served by the center in the years from 1923 to 1928. This experience is similar to that of the East End Maternity Home in London, where there was but one case of puerperal infection among 47,000 women.

The White House Conference on Child Health and Protection (1930) through its committee on prenatal care came to the conclusion on the basis of statistics published that nearly 50 percent of maternal deaths were preventable by adequate medical care. It outlined a program which included better training of physicians in the fundamentals of obstetrics and the establishment of institutions for the training of midwives with facilities for postgraduate study. It recommended that the state boards of health develop standards for the education, supervision and control of physicians and midwives. The 1932 report of the Committee on the Costs of Medical Care in pointing out the great expense of medical treatment for working class families goes even further in suggesting socialized medicine.

All of these services and programs, however, fall short of a comprehensive, coordinated national program. So little has the problem been appreciated by the medical profession at large and by responsible administrative authorities that the only national provision through which the deaths of mothers were being prevented has been allowed to lapse.

S. P. BRECKINRIDGE

See: CHILD, section on CHILD AND INFANT MORTALITY; MOTHERS' PENSIONS; DAY NURSERY; LABOR LEGISLATION AND LAW; WOMEN IN INDUSTRY; SOCIAL INSURANCE; HEALTH INSURANCE; PUBLIC HEALTH; HEALTH EDUCATION; HEALTH CENTERS; CLINICS AND DISPENSARIES; BIRTH CONTROL; ILLEGITIMACY; MORTALITY; MORBIDITY; MEDICINE.

Consult: White House Conference on Child Health and Protection, *Obstetric Education*, Section 1, Committee B, Subcommittee on Obstetric Teaching and Education, Report (New York 1932); Newsholme, Arthur, *International Studies on the Relation between the Private and Official Practice of Medicine with Special Reference to the Prevention of Disease*, vols. i-iii (London 1931-), and *Medicine and the State* (London 1932); League of Nations, Health Organization, *Report on Maternal Welfare and the Hygiene of Infants and Children of Pre-school Age by the Reporting Committee*, 1931. III. 13 (Geneva 1931); "Study of Certain Causes of Maternal Mortality" in League of Nations, Health Section, *Monthly Epidemiological Report*, vol. ix (1930) 279-306; International Labour Office, *Women's Work under Labour Law, Studies and Reports*, 1st ser., no. 2 (Geneva 1932); United States, Congress, Senate, Committee on Com-

merce, 72nd Cong., 1st sess., *Federal Cooperation with States in Promotion of General Health of Rural Population of United States and Welfare and Hygiene of Mothers and Children*, Hearings (1932); United States, Children's Bureau, "Promotion of the Welfare and Hygiene of Maternity and Infancy," *Publication*, no. 203 (1931), and "Maternal Mortality" by R. M. Woodbury, *Publication*, no. 158 (1926); United States, Bureau of the Census, *Mortality Statistics*, 1929, Annual Report, vol. xxx (1932) 12, 36-39, 100, 135, 168, 210, 221, 225, 425, 514; Wiehl, D. G., "Prenatal Care of Rural Mothers" in Milbank Memorial Fund, *Quarterly Bulletin*, vol. ix (1931) 95-102; Hughes, G. S., *Mothers in Industry* (New York 1925) ch. xi; Frankel, L. K., *The Present Status of Maternal and Infant Hygiene in the United States* (New York 1927); Canada, Department of Health, Division of Child Welfare, *Maternal Mortality in Canada* (Ottawa 1928); Macphail, E. S., "Statistical Study in Maternal Mortality" in *American Journal of Public Health*, vol. xxii (1932) 612-26; Great Britain, Ministry of Health, *Final Report of the Departmental Committee on Maternal Mortality and Morbidity* (London 1932), and Departmental Committee on Maternal Mortality and Morbidity, *Interim Report* (1930), and "The Protection of Motherhood," by J. M. Campbell, *Reports on Public Health and Medical Subjects*, no. 48 (1927); Scotland, Scottish Board of Health, *Maternal Mortality, Report on Maternal Mortality in Aberdeen 1918-1927*, by J. P. Kinloch, J. Smith, and J. H. Stephen (Edinburgh 1928); Goldschmidt, H., "The Application in Germany of the Washington Convention concerning the Employment of Women before and after Childbirth," and "The Employment of Women before Childbirth in German Industry" in *International Labour Review*, vol. xvi (1927) 637-47, and vol. xviii (1928) 86-92; *Die Wirkungen der Fabrikarbeit der Frau auf die Mutterschaft, Arbeit und Gesundheit*, no. xiv (Berlin 1930); Hirsch, Max, *Mutterschaftsfürsorge*, Monographien zur Frauenkunde und Konstitutionsforschung, no. 15 (Leipzig 1931); Field, A. W., *Protection of Women and Children in Soviet Russia* (New York 1932); Association Internationale pour la Protection de l'Enfance, *Protection de la mère et de la future mère* (n. p. 1927); Garbasso, A., "Le nuove provvidenze assicurative per la maternità" in *Assicurazioni sociali*, vol. v, no. 3 (1929) 1-15; Aznar, S., "The Introduction of Maternity Insurance in Spain" in *International Labour Review*, vol. xx (1929) 185-206; Pillay, A. P., *Welfare Problems in Rural India* (Bombay 1931), especially ch. v; India, "Indian Maternity Benefit Schemes," *Bulletin of Indian Industries and Labour*, no. 32 (Calcutta 1925).

MATHER, INCREASE and COTTON, American theologians. Increase Mather (1639-1723) became pastor of the Old North Church in Boston in 1664 and for the next thirty years was the religious leader of New England and probably the most influential person in Massachusetts. His son Cotton (1663-1728), for years his colleague and mouthpiece, inherited his role. Their lives were devoted to a struggle to maintain orthodox Calvinist theology, Congregational

church government and the power of the clergy as established by the founders of New England. In their voluminous writings they strove to inculcate a somewhat formal obedience to moral law and to frighten sinners by threats of temporal punishment. In politics they traced the fulfilment of Biblical prophecy, believing the end of the world to be close at hand. Both took great interest in science always from a teleological point of view; they gathered data for English scientists and helped introduce smallpox inoculation into New England. They wrote several books describing witchcraft in New England, and Cotton Mather took a prominent part in the Salem persecution of 1692. As a result the Mathers' popularity waned. Their influence was weakened by the charter of 1691, under which the governor was appointed by the king instead of being elected by the freemen. The growth of an Arminian tendency in the churches of eastern Massachusetts upset their theological monopoly. Greedy of power and vain—Cotton's diary records repeated assurances that his labors were pleasing to God—they fought a losing fight against the rising secular views of the upper class of New England. In 1701 Increase was ousted from the presidency of Harvard; and although their preeminence in learning and piety was never challenged, the Mathers lost political influence and ecclesiastical control. Their fall spelled the end of the Puritan theocracy.

H. B. PARKES

Consult: Schneider, Herbert W., *The Puritan Mind* (New York 1930); Murdock, K. B., *Increase Mather, the Foremost American Puritan* (Cambridge, Mass. 1925); Boas, R. and L., *Cotton Mather, Keeper of the Puritan Conscience* (New York 1928).

MATHIEZ, ALBERT (1874-1932), French historian. Mathiez went through the normal discipline of French academic historians, became a disciple of Aulard and until their quarrel in 1904 was regarded as the master's logical successor. This quarrel, Mathiez' political sympathies with the extreme left and his unwillingness to adapt himself to the likes and dislikes of his colleagues long kept him from succeeding Aulard at the Sorbonne. Before he died, however, he had the satisfaction of a call to Paris. Although he taught in the provinces for some twenty years he worked constantly in the archives. Most of his work appeared in the form of articles or book reviews in the *Annales révolutionnaires* (1908-23, continued under the title *Annales historiques de la Révolution française*, 1924-),

which he founded and edited until his death. He did, however, write a general history of the revolution, the first three volumes of which were published as *La Révolution française* (3 vols., Paris 1922-27; tr. by C. A. Phillips, 1 vol., New York 1928) and the fourth as *La réaction thermidorienne* (Paris 1929; tr. by C. A. Phillips as *After Robespierre: the Thermidorian Reaction*, New York 1931). The work is extremely condensed, addressed to the general public, clearly and simply written, relatively free from disputations with other writers. Mathiez' more important monographic writings include *La philanthropie et le culte décadaire 1796-1801* (Paris 1904), *Rome et le clergé français sous la Constituante* (Paris 1911), *Un procès de corruption sous la Terreur: l'affaire de la Compagnie des Indes* (Paris 1920), *La vie chère et le mouvement social sous la Terreur* (Paris 1927). At his death he was universally recognized as the leading historian of the French Revolution.

Mathiez' work is an extraordinary compound. He held rigorously to the notion that the historian must relate "how it really happened," that he can and must be completely impartial, that he must spend most of his time in the archives. He considered himself a "scientific" historian as that phrase was understood in the late nineteenth century; for the "new," or sociological, history he had nothing but contempt. Yet he was the first professional historian to popularize the economic interpretation of the French Revolution. He must undoubtedly be classed with the prorevolutionary historians: no member of the official school assailed the conservatives more bitterly or more fervently defended the First Republic against the attempts of the school of Taine to explain it as the product of political intrigue rather than of circumstances. But he broke with Aulard and the orthodox republicans, superficially because he asserted that Danton was a traitor not a hero, more profoundly because he could not accept the liberal mythology of the great revolution. Although the general public always identified him with Marxism and although he admired Jaurès sufficiently to undertake a laborious reedition of the *Histoire socialiste de la Révolution française* (8 vols., Paris 1922-24), it was not the dictates of socialist dogma which determined his approach. He was drawn to the economic interpretation of history by the conviction that human beings are moved by appetites and interests, not by words. After Aulard's willingness to take the word for the deed such a point of view could not help but

freshen the study of the subject. Mathiez succeeded in casting off the accretions which time had added to the revolutionary myth; he illuminated the gap between the revolution and the Third Republic of the early twentieth century with its compromises and softness, with its mouthing of "Liberty, equality and fraternity" to sanctify a system of middle class rule. He made himself a Jacobin, a true Jacobin of 1794, and brought to his work the unyielding religious idealism (a phrase he would have loathed) of the makers of the Terror. This scorner of mere phrases held up as the hero of the revolution its greatest phrasemaker—and therefore perhaps its greatest prophet—Robespierre, whom he depicted as a practical man, a gifted leader, an upright statesman working for an attainable democratic republic. Mathiez' integrity, industry and frequent hardheadedness have uncovered much that but for him would still lie unburied. He was a master of invective, a talent he displayed especially in his book reviews. His work was rigorously limited to the French Revolution; and, true to his conception of history as the objective narration of the unique, he never attempted to draw upon his knowledge of the revolution to produce generalizations on the behavior of men in society.

CRANE BRINTON

Consult: Memorial number of the *Annales historiques de la Révolution française*, vol. ix (1932) no. 3; Caillet-Bois, R. R., "Bibliografía de Albert Mathiez" in Buenos Aires, University, Instituto de Investigaciones Históricas, *Boletín*, vol. xiv (1932) 268-453; Michon, Georges, "Albert Mathiez, rénovateur de l'histoire de la Révolution française" in *Europe*, vol. xxix (1932) 152-71.

MATLEKOVITS, SÁNDOR (1842-1925), Hungarian economist. Originally under the influence of the German historical school, Matlekovits gradually shifted his position toward the English classical views until he finally became the outstanding Hungarian representative of economic liberalism. As tariff expert and representative of the Hungarian government he asserted his free trade views in negotiations of commercial treaties; his liberal industrial policy was incorporated into the Hungarian industrial bill of 1884, which was prepared by him and remained in force for nearly fifty years. In the course of his treaty negotiations between the Reich and the Hapsburg monarchy he clashed with Bismarck, who from 1879 urged the agrarian-protectionist trend—a tendency which found its way into the Austro-Hungarian customs

tariff of 1882. After Bismarck's retirement the policy of commercial treaties was revived in central Europe in 1889; at that time, however, Matlekovits was no longer in office, having resigned in the same year as undersecretary of state for commerce.

Matlekovits' main work, *As osztrák-magyar monarchia vámpolitikája 1850-től kezdve napjainkig* (Budapest 1877), revised in German as *Die Zollpolitik der österreichisch-ungarischen Monarchie und des Deutschen Reiches seit 1868 und deren nächste Zukunft* (Leipsic 1891), written with a view to influencing the commercial relations of mid-European countries in the direction of free trade, is a standard treatise on the commercial policy of Austria-Hungary and Germany and contains a penetrating analysis of the effect of customs duties on production and formation of prices. His other works include *Magyarország államháztartásának története 1867-1893* (2 vols., Budapest 1894; tr. into German as *Geschichte des ungarischen Staatshaushaltes*, Vienna 1895), which still constitutes a valuable source of Hungarian history; *Das Königreich Ungarn volkswirtschaftlich und statistisch dargestellt* (2 vols., Leipsic 1900), which contains an integrated account of the social and economic conditions in pre-war Hungary; and "Die handelspolitischen Interessen Ungarns" (in *Verein für Sozialpolitik, Beiträge zur neuesten Handelspolitik Österreichs*, Schriften, vol. xciii, Leipsic 1901, p. 1-60), in which he defended the interests of the Austro-Hungarian monarchy, especially those of Hungary, against Germany's prohibitive tariff policy. His last major effort was directed against the strongly protectionist Hungarian tariff act of 1924. Subsequent events fully justified Matlekovits' views; the attempts of the small central European states at economic self-sufficiency contributed considerably to the economic and financial collapse of central Europe in 1931-32.

ELEMÉR HANTOS

Consult: Naményi, E., *Matlekovits Sándor* (Budapest 1923); Éber, A., in *Közgazdasági szemle*, vol. lxix (1926) 121.

MATOV, KHRISTO (1872-1922), Bulgarian-Macedonian revolutionary. Matov, who was a teacher and school inspector in the Uskub region, assisted Gruev and Delchev in the foundation of the Interior Macedonian Revolutionary Organization (IMRO) in 1893. Modeled on the Italian Carbonari, the IMRO aimed to liberate Macedonia from the Turkish yoke; after

Macedonia became part of Serbia it struggled against Serbian domination. In 1895 Matov became a member of its central committee. For decades he was one of its principal organizers and terrorist plotters, playing a leading role during the widespread insurrectionary movement of 1903 and in the movement of resistance to Serbian and Greek propaganda and foreign interventionism. He founded the village militia, a sort of revolutionary gendarmery, as well as other special branches of the movement both legal and illegal. He was several times imprisoned by the Turks and attacked by assassins.

The leading theorist and agitator of the IMRO, he popularized by speeches and writings knowledge of its aims, methods and problems. Against the current of foolhardiness common in the movement Matov successfully advocated planned organization and the basing of tactics (including individual terror) on the needs of specific occasions. This approach was always empirical rather than dogmatic, and he strove to base his thinking on a concrete study of local social conditions. He was the first to try to analyze the relative values of individual terrorism and popular insurrection, of organizational centralization and decentralization of legal and illegal methods of struggle, and to formulate clear policies on the questions of foreign intervention, the Young Turk reforms and the expansionism of the Bulgarian government.

JOSEF MATL

Works: Matov's works are collected in the *Makedonska revoliutsionna biblioteka*, vols. i-iv (Sofia 1925-28).

Consult: Brusnakov, in *Damé Grouev, Perè Toschev, Boris Sarafov, Ivan Garvanov, Christo Matov*, *Pro Macedonia* series, no. 3 (Sofia 1925).

MATRIARCHATE. *See* SOCIAL ORGANIZATION.

MATTEOTTI, GIACOMO (1885-1924), Italian socialist. The son of a fairly wealthy family of the agrarian middle class in Veneto, Matteotti studied law at the University of Bologna, wrote an interesting and instructive treatise on recidivism in criminal law and contributed to the *Rivista penale*, the most important review devoted to the study of criminal law in Italy. In common with other middle class intellectuals who at the time were turning to socialism Matteotti early became a Socialist and identified himself with the reformist wing of the party. He was elected to a number of local and provincial

offices and then to the Chamber of Deputies, where his activity, although not particularly distinguished, was marked by industry, precision in the analysis of facts and documents and a quiet strength born of intellectual conviction. He was imprisoned for opposing Italy's participation in the World War.

Matteotti's reputation is largely due to the struggle he waged against triumphant Fascism. He became the leader of the dwindling parliamentary opposition, secretary of the considerably weakened Socialist party and the most redoubtable and practically the only vocal adversary of the Fascist government. His fearless criticism was based on the law, justice and democracy, on documentary evidence of the oppressive character of the new regime, on an appeal to all the classes. With the consolidation of Fascist power and its support by the middle class, however, Matteotti became isolated. Nevertheless, he continued to criticize the Fascist regime even when everyone, including himself, knew that his life was in danger. On May 30, 1924, Matteotti delivered an address in the chamber against Fascist intimidation and frauds in the elections of the previous month, during which he was interrupted and insulted by deputies whose election was due to the machinations he denounced. Ten days later Matteotti was kidnaped in the street, carried away in an automobile and killed. It was established that a certain Amerigo Dumini was the driver of the automobile. A year and a half later the judicial authorities in Rome ruled that Dumini and his accomplices had not committed the crime on their own initiative. At the trial in Chieti, in March, 1926, the verdict was given as unintentional homicide. Cesare Rossi, who at the time of the murder was one of the most intimate associates of Mussolini, and Dumini himself declared that Matteotti was assassinated upon direct order of Mussolini, which Mussolini denied. Matteotti's murder created an enormous revulsion of public sentiment and a crisis which almost wrecked the Fascist regime, but the disorganized opposition was unable to utilize the opportunity for effective action.

ARTURO LABRIOLA

Important works: *Il concetto di sentenza penale e la dichiarazione d'incompetenza in particolare* (Turin 1919); *Un anno di dominazione fascista* (Rome 1924), tr. by E. W. Dicks as *The Fascisti Exposed: a Year of Fascist Domination* (London 1924); *Reliquie* (Milan 1924).

Consult: Gobetti, P., *Matteotti* (Turin 1924); Mariani, Mario, *Matteotti* (Paris 1927); Salvemini, G., "L'af-

faire Matteotti" in *Europe*, vol. x (1926) 76-97, tr. as "A Story of Crime: the Murder of Matteotti" in *Review of Reviews* (London), vol. lxxiii (1926) 49-55; Fuchs, James, "Why Matteotti Had to Die" in *Nation*, vol. cxix (1924) 114-15; "The Matteotti Trial" in *Review of Reviews* (London), vol. lxxiii (1926) 304.

MAUDSLEY, HENRY (1835-1918), British alienist and psychologist. Maudsley was born in Yorkshire and was educated at University College, London, where he took his degree in medicine in 1857. He served as medical superintendent at the Manchester Royal Lunatic Hospital from 1859 to 1862 and developed an interest in the psychological and legal phases of the problem of insanity. For ten years (1869-79) he was professor of medical jurisprudence at University College. His most important writings date from this period, and his *Physiology and Pathology of Mind* (London 1867; enlarged and revised separately as *Physiology of Mind*, London 1876, and *Pathology of Mind*, new ed. London 1895) early gave him a vast reputation. In his later years he wrote a number of works on moral and philosophical topics.

Maudsley is today remembered chiefly as one of the first to attempt to bring together material from the fields of physiology, pathology and psychology for the development of what was later to become the science of psychiatry. For him mental disease had its basis in the biological and psychological realms but was to be regarded at the same time as a social phenomenon which could be investigated satisfactorily only from a social point of view. His interest in mind-body relationships led him to question the superstitious reverence for the legal criterion of responsibility, for, as he pointed out, one may know an act to be unlawful and yet be impelled to commit it by a conviction or an impulse which one is powerless to resist. He also attacked the faculty conception of will, arguing that "the will apart from particular acts of volition and will we cannot know. . . . It is the property of tissue which gives the impulse which we call volition and it is the abstraction from the particular volitions which metaphysicians personify as the Will." Maudsley's physiological approach to mental problems did not prevent him from utilizing the conception of the unconscious, whose existence he explained, however, on the basis of brain arrangements. Maudsley believed that there are cases of absence or destruction of the moral sense resulting from pathological brain conditions or from incomplete development. He

held that criminals need scientific treatment, differing from that of the insane but along the same general lines.

WILLIAM HEALY

Other important works: *Responsibility in Mental Disease* (London 1874, 5th ed. 1892); *Body and Mind* (London 1870, rev. ed. 1873); *Natural Causes and Supernatural Seemings* (London 1886, 3rd ed. 1897); *Life in Mind and Conduct* (London 1902); *Heredity, Variation and Genius* (London 1908).

Consult: Savage, G. H., and others, "Henry Maudsley" in *Journal of Mental Science*, vol. lxiv (1918) 118-29.

MAURER, GEORG LUDWIG VON (1790-1872), German jurist and social historian. Born in a Protestant clerical family of the Palatinate and educated in the *Gymnasium* and the University of Heidelberg partly as a comrade of the later King Ludwig I of Bavaria, he symbolized in his character and work the temper of the Rhinelanders convinced that many of the ideals of the French Revolution were but the rediscovery of older Germanic constitutional principles. Author of a *Geschichte des altgermanischen und namentlich altbayerischen öffentlich-mündlichen Verfahrens* (Heidelberg 1824) which championed the principles of orality, publicity and lay participation in procedure, he was called to introduce the jury into the Bavarian courts and then to occupy a chair of German private law and legal history at Munich. As member of the Bavarian *Staatsrat* and *Reichsrat* he proceeded in 1832 to accompany the newly elected king of Greece, Ludwig I's son Otto, in the capacity of a member of the regency council during the prince's minority, but his partiality for a parliamentary government soon brought him into conflict with the other regents. No more lucky was his short activity on the eve of the Revolution of 1848 as Ludwig I's minister for justice and foreign affairs.

His removal from public affairs left Maurer free to work on the great series of monographs on the different forms of the mediaeval German community which served as the chief foundation of Gierke's later and more famous work, while at the same time through Friedrich Engels they furnished a less critical corner stone for the Marxian interpretation of German social and constitutional history. Although a strong liberal and democratic bias symbolical of his age is unmistakable in Maurer's pervading viewpoint of popular autonomy and self-government, Gierke's somewhat different accent and the equally strong leanings of the school of Georg

Waitz toward an individualistic and seigniorial viewpoint have up till now prevented German constitutional history from doing full justice to Maurer's work. In fact the question as to the oldest forms of European administrative and agricultural organization is still largely open.

CARL BRINKMANN

Important works: *Geschichte der Markenverfassung in Deutschland* (Erlangen 1856); *Geschichte der Fronhöfe, der Bauernhöfe und der Hofverfassung in Deutschland*, 4 vols. (Erlangen 1862-63); *Geschichte der Dorfverfassung in Deutschland*, 2 vols. (Erlangen 1865-66); *Geschichte der Städteverfassung in Deutschland*, 4 vols. (Erlangen 1869-71).

Consult: Stintzing, R. von, and Landsberg, E., *Geschichte der deutschen Rechtswissenschaft*, 3 vols. (Munich 1880-1910) vol. iii, pt. ii, p. 308-11, 531-32, and 542-43; Schmoller, G., *Deutsches Städtewesen in älterer Zeit*, Bonner Staatswissenschaftliche Untersuchungen, no. 5 (Bonn 1922) p. 5-8; Heigel, K. T. von, "Denkwürdigkeiten des bayerischen Staatsrats Georg Ludwig von Maurer" in Bayerische Akademie der Wissenschaften, Philosophisch-philologische und historische Klasse, *Sitzungsberichte* (1903) 471-512.

MAURER, KONRAD VON (1823-1902), German legal historian. Konrad von Maurer, the son of the legal historian Georg Ludwig von Maurer (1790-1872) studied jurisprudence and philology in Munich, Leipsic and Berlin under such famous teachers as Albrecht, Homeyer, Grimm and Richthofen. His doctoral thesis, *Über das Wesen des ältesten Adels der deutschen Stämme* (Munich 1846), evidenced such unusual abilities that in 1847 he was appointed professor extraordinary and in 1855 professor of German law in Munich. In 1876 he lectured on Norse legal history at Christiania. He had confined himself increasingly from 1868 on to the study of this subject and in 1888 discontinued teaching, devoting himself thereafter entirely to research.

Maurer was a jurist, historian and philologist and was deeply interested in the philosophy of religion and folklore; he did pioneer work in many fields of Germanic study. His doctor's dissertation and three other papers dealing with Anglo-Saxon law were unusually fruitful works in which the author laid down the basic lines of the Anglo-Saxon law of status and of real property. It was Maurer also who stimulated Felix Liebermann's edition of the Anglo-Saxon law.

He was primarily interested, however, in clarifying the Norse past. He introduced the Norse sagas and Eddas as historical sources, although he later became somewhat more cautious and

skeptical of their reliability. A great number of his works were concerned with Scandinavian legal sources, in which field very little scientific work had been done and in which his work, so far as it went, was conclusive. The Norse law books were explained as original private records of the *lagsaga*, first written down in the twelfth century. He investigated most critically the legal technique of the Norse peoples, especially the office of the law speaker and the organization of the thing, the local assembly. He not only furthered the knowledge of the law governing the various estates, those of the nobility, serfs and freedmen, but also advanced private law, criminal law, the law of procedure, especially that of the ordeal, and family law. The last gave him a special opportunity to weigh the obscure and conflicting sources and to elucidate their chronological evolution.

Maurer's interest centered chiefly in Iceland. He continually investigated the development of the state in Iceland, where alone in the Germanic world it is possible to trace the growth of the state from the first immigration, from the *goðorð*, that is, the chieftaincies, to the unification. In 1852 appeared his first book on Iceland, *Die Entstehung des isländischen Staates und seiner Verfassung* (Munich), which was translated into Icelandic in 1882. In 1874 he published *Island, von seiner ersten Entdeckung bis zum Untergange des Freistaates* (Munich), a constitutional and cultural study which amplified his earlier work and covered also the later period. Maurer took a lively interest in the contemporary condition of the island. He not only collected Icelandic sagas but through the press continually aided the Icelandic struggle for freedom.

Maurer's studies of ecclesiastical history and canon law attracted considerable attention. His most comprehensive work in this field was *Die Bekehrung des norwegischen Stammes* (2 vols., Munich 1855-56), where he portrayed the history of the conversion of the Norwegian people with absolute accuracy and psychological profundity. In no other work has the transition from Germanic paganism to Christianity been so clearly observed or have the mixed elements which affected the period of transition—Germanic culture and the southern influences—been so sharply distinguished. The problem of the connection between the law and religion especially stimulated valuable research.

The list of Maurer's writings includes over three hundred titles. The many aspects of his work and of his learning made it possible for

him thoroughly to review foreign works. His critiques, which occasionally amounted to monographs and which appeared in various learned periodicals, aroused widespread interest and furthered the relations between German and Norse scholars. Maurer had many disciples both in Germany and Scandinavia, the greatest of whom was Karl von Amira.

EBERHARD VON KÜNSSBERG

Works: "Überblick über die Geschichte der nordgermanischen Rechtsquellen" in *Enzyklopädie der Rechtswissenschaft*, ed. by F. von Holtzendorff, vol. i (5th ed. Leipsic 1890) p. 349-85, enlarged in Norwegian as *Udsigt over de nordgermaniske retskilders historie* (Christiania 1878); "Zwei Rechtsfälle in der Eigla," and "Zwei Rechtsfälle aus der Eyrbyggja" in *Bayerische Akademie der Wissenschaften, Munich, Philosophisch-historische Klasse, Sitzungsberichte* (1895) 65-124, and (1896) 3-48; *Das älteste Hofrecht des Nordens, eine Festschrift zur Feier des vierhundertjährigen Bestehens der Universität Upsala* (Munich 1877); "Über die Wasserweihe des germanischen Heidenthumes" in *Bayerische Akademie der Wissenschaften, Munich, Philosophisch-historische Klasse, Abhandlungen*, vol. xv, pt. iii (1881) 173-253.

Consult: Mayer, Ernst, "Konrad Maurer" in *Zeitschrift der Savigny-Stiftung für Rechtsgeschichte, Germanistische Abteilung*, vol. xxiv (1903) v-xxvii; Amira, Karl von, *Konrad von Maurer, Gedächtnisrede* (Munich 1903); Golther, Wolfgang, in *Zeitschrift für deutsche Philologie*, vol. xxxv (1903) 59-71; Hertzberg, Ebbe, in *Historisk tidsskrift*, vol. iii (1875) 367-84; Taranger, Absalon, in *Tidsskrift for retsvidenskab*, vol. xvi (1903) 1-29; Van Vleuten, M., in *Kritische Vierteljahresschrift für Gesetzgebung und Rechtswissenschaft*, vol. xlv (1904) 1-26, with bibliography of Maurer's works.

MAURICE, FREDERICK DENISON (1805-72), English theologian. Maurice was brought up as a Unitarian, his father being a preacher of that sect, but his views changed and he was ordained priest in the Church of England. His opinions remained strongly heterodox, however, and most of his life was spent in acute theological controversy with all the leading church parties of his day—High, Low and Broad alike. He had radical sympathies from the first, but he took no direct part in political or economic movements until the time of the French Revolution of 1848, when he became the central figure of the group which under J. M. Ludlow's inspiration founded the Christian Socialist movement. With Ludlow he edited *Politics for the People*, the first Christian Socialist organ, to which Charles Kingsley was a prominent contributor. At the earlier conferences of the Christian Socialists he was usually in the chair, and he was closely connected with their endeavors to found self-governing

workshops and to secure legal recognition for the cooperative movement. This occupied much of his energy in the years from 1848 to about 1855, but thereafter with the failure of the Christian Socialist cooperative associations he dropped out of political and economic activity. He continued, however, to interest himself keenly in working class education. While professor of English literature and history at King's College, London, from 1840 to 1853 he cooperated in founding Queen's College, designed especially to help women who wanted training as governesses. After he had been driven from King's College on charges of theological heterodoxy he founded in 1854 the (London) Working Men's College. He became its first principal and gathered round him there a distinguished body of voluntary lecturers of very varying views. In 1866 he was elected to a professorship of philosophy at Cambridge, but he continued his relations with the Working Men's College.

Maurice's writings, of which the best known is *The Kingdom of Christ* (London 1837, 3rd ed. 1883), are almost wholly theological apart from an early novel and a good deal of journalism. In his own day he counted far more as a person than as a writer, having an eminent power of attracting friends and disciples round him and a remarkable gift for influencing his associates by his talk. Politically he was never a socialist in any ordinary sense, although he was a radical in opinion. It was only the excitements of 1848 that drew him into political and economic movements, and he seems to have been uncomfortable in the part he found himself called upon to play in them. He was an educationist in a far more real sense; and in that field far more of his work survives.

G. D. H. COLE

Consult: Maurice, F., *The Life of Frederick Denison Maurice*, 2 vols. (2nd ed. London 1884); Masterman, C. F. G., *Frederick Denison Maurice* (London 1907); Raven, Charles E., *Christian Socialism 1848-1854* (London 1920); Courtney, J. E. H., *Freethinkers of the Nineteenth Century* (London 1920) p. 11-64; Seligman, Edwin R. A., *Essays in Economics* (New York 1925) p. 33-57.

MAUVILLON, JAKOB (1743-94), German physiocrat. Mauvillon's significance consists in having introduced the physiocratic system into Germany. The fact that the system was introduced not in Quesnay's original version but on the basis of Turgot's *Réflexions sur la formation et la distribution des richesses* (1766), which Mauvillon had translated into German in 1775, is of

considerable importance in the evolution of German economic thought. It helps to explain the lack of comprehension on the part of German physiocracy of the philosophical starting point of the original physiocracy concerning the dualism of *ordre naturel* and *ordre positif*, which is given only in Quesnay's original form, and it may also explain how physiocracy was reduced in Mauvillon's mind to the mere doctrine of free trade. In his trade policy Mauvillon was much more extreme than the French physiocrats; his economic liberalism found its theoretical support in his concept of the state, according to which the latter is regarded as in the doctrine of the purely juridical state as a "system of private persons" which abstains from all interference with the private activities of the people. Mauvillon was an adherent of the *impôt unique* on land; while he admitted that the usual systems of taxation based on indirect taxes would produce the same effect as the *impôt unique*, since the taxes are ultimately shifted upon the landowners, he advocated the latter form because of its low collection cost and other advantages. Mauvillon's tax theory is not free from mercantilistic elements and he sees the just measure for levying taxes not in the actual but in the potential national requirements as revealed in "the powers of the state, its size, amount of population, and wealth." He collaborated with the younger Mirabeau in the latter's *De la monarchie prussienne, sous Frédéric le Grand* (London 1788). Here also Mauvillon's cameralistic leanings are apparent; the summary of his political philosophical system follows along the lines of cameralistic systematics. In the cameralistic spirit too is his conception of statistics, which he developed in the *Monarchie prussienne* and which going beyond mere description aimed to furnish a contribution to the "philosophical" theory of the state.

LOUISE SOMMER

Works: *Sammlung von Aufsätzen über Gegenstände aus der Staatskunst, Staatswirtschaft und neuesten Staatengeschichte*, 2 vols. (Leipsic 1776-77) vol. ii; *Briefwechsel*, ed. by F. Mauvillon (Brunswick 1801); *Physiokratische Briefe an den Herrn Professor Dohm, oder Verteidigung und Erläuterung der wahren staatswirtschaftlichen Gesetze, die unter dem Namen des physiokratischen Systems bekannt sind* (Brunswick 1780).

Consult: Roscher, W., *Geschichte der Nationalökonomik in Deutschland* (Munich 1874) p. 493-94; Reissner, H., *Mirabeau und seine "Monarchie Prussienne"* (Berlin 1926). For controversy between Mauvillon and Dohm, see Dohm, C. W., "Über das physiokratische System" in *Deutsches Museum*, vol. ii (1778) 289-324.

MAVOR, JAMES (1854-1925), Canadian economist, historian and public servant. The son of a Scottish school teacher, Mavor left school at fourteen to become a drysalter's apprentice in Glasgow but continued his education in night classes at Anderson's College. His omnivorous interest in men and ideas made him something of a Boswell and commended him to a circle of outstanding men which steadily widened to include England, the continent and North America. In 1892 W. J. Ashley chose him as his successor in political economy at the University of Toronto. Although he took part in some of the British collectivist movements in the 1880's and 1890's, Mavor became essentially the conservative, or individualistic, social critic, as was revealed in his official and semi-official investigations of Scottish railway administration, European housing projects and reform colonies, workmen's compensation, immigration policies for the Canadian northwest and the provincially owned systems of telephones in Manitoba and of electric power in Ontario. He provided much ammunition for the opponents of public ownership in North America and for thirty years his criticisms of socialistic trends provoked considerable discussion.

While in Europe investigating emigration to Canada he was induced by his friend Kropotkin to arrange for the settlement in Alberta of the Russian pacifist sect, the Dukhobors. This led to acquaintance with Tolstoy and to an interest in Russian life and history resulting in his best known work, an economic history of Russia, which he wrote with the assistance of Pantelemon Nikolaiev, while borrowing extensively from Kluchevsky's works. An analogous economic history of Canada was projected but never published. His influence, undoubtedly considerable in the scholarly world, was largely personal and provocative.

J. BARTLET BREBNER

Important works: *Report . . . on the North West of Canada* (London 1905); *Government Telephones* (New York 1916); *An Economic History of Russia*, 2 vols. (London 1914, 2nd ed. 1925); *The Russian Revolution* (London 1928); *Niagara in Politics* (New York 1925); *My Windows on the Street of the World*, 2 vols. (London 1923).

MĀWARDI, ABU AL-HASAN AL- (c. 972-1058), Moslem jurist. Scant information regarding the life of al-Māwardi is available in Arabic sources. They indicate, however, that he was born in Basra, became a preeminent *Mudarris*, or professor of Islamic law, was asked by the

Abbasside caliphs of Bagdad to become a judge and finally attained the highest rank in the hierarchy, that of *Qādī al-Qudāt*, more or less equivalent to chief justice.

Of his many treatises that which won him high renown and extreme regard in the legal world of the Moslems was *Kitāb al-Ahkām al-Sultāniya*. In it al-Māwardī did not attempt to produce an original conception of some ideal system of government in the way of the *Utopia* of Sir Thomas More or the "Salente" of Fénelon's *Télémaque*; such a work would have been of no legal worth. His book deals instead with strictly orthodox (Sunna) doctrine and is accordingly uniquely valuable for the study of the Sunnite Islamic interpretation of public law—in contradistinction to that of the Shiite schism of Persia. Islamic law does not discriminate between what Europeans call canon, civil and public law; and its rules concerning the last are as a result scattered amongst the thousands of pages of the bulky treatises of Moslem jurisprudence. What al-Māwardī achieved was the collection and systematic exposition in one distinct work of all the orthodox Islamic rules referring to the several provinces of public law as it was conceived in orthodox Islam. First he expounded in great detail the law of the caliphate, the source, in Islamic doctrine, of all legitimate authority. Pursuing this trend of inquiry he discussed the law concerning all the series of authorities created by delegation of the universal power of the caliph and explained especially the system, fundamental in Islamic law, of the law of war. He expounded also the regulations concerning conquest, the status of non-Moslem subjects, taxes and finance, judicial power and the rights and duties of the police, carefully indicating in each case the controversies which had arisen between the representatives of the four orthodox doctrines of Islam (Hanafite, Shafiite, Malikite, Hanbalite) as well as the theories put forward by dissenters.

LÉON OSTRORÓG

Works: The *Kitāb al-Ahkām al-Sultāniya* has been edited as *Maverdii constitutiones politicae* by M. Enger (Bonn 1853), tr. into French by E. Fagnan as *Les statuts gouvernementaux* (Algiers 1915).

Consult: Ostrotog, Léon, Preface to his partial translation of the *Kitāb, El-ahkām es-soulthāniya: Traité de droit public musulman*, 2 vols. (Paris 1901-06) vol. i, p. iv-ix; Fagnan, E., Introduction to his translation of the *Kitāb*, p. v-xiii; Carra de Vaux, B., *Les penseurs d'islam*, 5 vols. (Paris 1921-26) vol. i, p. 273-77, and vol. iii, p. 349-60; Arnold, T. W., *The Caliphate* (Oxford 1924) p. 70-72.

MAXWELL, SIR WILLIAM (1841-1929), Scottish cooperative leader. Maxwell, who was born of working class parents in Glasgow, began work at the age of ten and at twelve was apprenticed to a coach builder. He supplemented his meager education by night school study and at the age of twenty made a tour of the British Isles on foot in order to observe living and working conditions. Through his reading on the Rochdale system of cooperation and his contact with an uncle who was then treasurer of the Lennoxtown Cooperative Society (established in 1812 and the oldest surviving cooperative society today) he became vastly interested in the cooperative movement. He joined St. Cuthbert's Cooperative Association in Edinburgh in 1874 and became a noted propagandist for the cause. In 1880 he was elected director of the Scottish Cooperative Wholesale Society and a year later was elected to its presidency, holding the office until his voluntary retirement in 1908. From 1907 until 1921 he was president of the International Cooperative Alliance. He was made a knight of the British Empire in 1919.

Under Maxwell's direction the Scottish Wholesale Society, which previously had been only a distributive organization, embarked upon production. Its first venture was in shirt making, the most sweated of all industries, and was speedily followed by factories for the production of other necessities. During the period of his office the turnover of the society increased from £850,000 to £7,500,000 per annum. On the principle that cooperative societies which could not supply all needs should combine, he advocated and saw instituted the partnership between the English and Scottish cooperative wholesale societies. He fought for and succeeded in establishing the right of employees of the Scottish Wholesale Society to be shareholders.

His suggestion in 1913 that the cooperative movement ally itself in the political field with other working class organizations resulted in the crystallization of the movement's political program. As early as 1907 Maxwell advocated the establishment of an International Cooperative Wholesale Society along the lines of that which is now engaged in its preliminary operations. He was a convinced free trader and an advocate of international peace.

JAMES A. FLANAGAN

Important work: *History of Co-operation in Scotland* (Glasgow 1910).

Consult: "Sir William Maxwell's Strenuous Life" in *Co-operative News* (February 16, 1929) p. 2, 5.

MAYER, MAX ERNST (1875-1923), German jurist. Mayer, the son of a wealthy Jewish industrial family, was born in Mannheim. As a student of philosophy and law at various German universities he was influenced particularly by Kuno Fischer, Windelband and Georg Jellinek. He taught criminal law and the philosophy of law at the University of Strasbourg and advanced to the rank of professor. During the World War he was active as a jurist in military tribunals and subsequently accepted a chair in Frankfurt, where he died before reaching the age of fifty.

Mayer was one of the most striking personalities in recent German jurisprudence, combining two attributes seldom found in harmonious association. He was a brilliant and remarkably acute theorist and at the same time was endowed with true philosophical judgment. Both of these characteristics were exhibited in his two early writings on culpability, where he defined the culpable act as an action of the will that is contrary to duty and is followed by unlawful consequence. With this definition he laid the basis for his first large monograph, *Rechtsnormen und Kultur-normen* (Breslau 1903), which dealt essentially with problems in the philosophy of law. In this work he modified the thesis of Binding, who had stated that delinquent action contravened not the penal law but the customary law norm behind the penal law (e.g. the Mosaic commandment Thou shalt not kill). Mayer pointed out that the norm contravened was not legal but cultural. Mayer's purely sociological approach, it may be said, failed to allow for the fact that whenever legal and cultural norms conflict the former always prevail.

Mayer also wrote excellent works of a purely expository nature, especially in the neglected field of military criminal law; a short but fundamental and systematic outline of the latter, *Deutsches Militärstrafrecht* (2 vols., Leipzig 1907), merits special notice. His extensive critical contributions to the reform of German criminal law also deserve mention.

Mayer's first comprehensive work was his text on criminal law, *Lehrbuch des deutschen Strafrechts* (Heidelberg 1915, 2nd ed. 1923), a work which treated only the general doctrines of criminal law and not the specific offenses. Although Mayer endeavored to occupy a middle position in the conflict between the classical and sociological schools, the real emphasis of his doctrine was in agreement with Liszt's point of view. His theory of punishment developed the ultimate demands of the sociologist.

His other major work is his *Rechtsphilosophie* (Berlin 1922). This reflects especially the influence of Windelband's and Rickert's "philosophy of values." Mayer looks upon the law as something objective and rejects the emphasis on the idea of justice because of its subjective implications. He thereby confirms that sociological approach of which he had sketched the methodology in his *Rechtsnormen und Kultur-normen*. Because of the dominance of Kelsen's formalistic trend in German legal thought Mayer's concrete approach has not as yet received the recognition which it deserves, but his work will doubtless exert a great influence when the present tide of formalism begins to ebb.

H. B. GERLAND

Consult: Hippel, R. von, *Deutsches Strafrecht*, vols. i-ii (Berlin 1925-30) vol. i, p. 22-25; Dohna, Alexander, in *Gerichtssaal*, vol. lxiii (1904) 355-58; Gerland, H. B., in *Kritische Vierteljahrsschrift für Gesetzgebung und Rechtswissenschaft*, vol. xlv (1905) 414-55; Salomon, Max, "Die Ueberwindung des Personalismus und Transpersonalismus bei Max Ernst Mayer" in *Archiv für Rechts- und Wirtschaftsphilosophie*, vol. xviii (1924-25) 431-46.

MAYER, OTTO (1846-1924), German jurist. Mayer, who was born in Fürth in Bavaria, studied at the universities of Erlangen, Heidelberg and Berlin between 1865 and 1868 and in 1871 became a magistrate in his native town. Following a short career as an attorney he became in 1881 *Privatdozent* in French civil law and international private law at Strasbourg, attaining the rank of professor in 1882. From 1903 until 1918, when he became emeritus, he was professor in Leipzig. To a considerable extent the rise of administrative law as a juristic conceptual science is due to Mayer, whose work made a scientific system out of what was previously a mere collection of precepts. Laband had prepared its way by introducing the idea of public law as a pure legal discipline; and a growing acquaintance, as a result of political developments, with French administrative organization furnished the immediate stimulus. Mayer's acquaintance with the conceptual world of Roman, French and German law qualified him particularly to elaborate a new and independent theory. His readings in administrative law, a subject then largely ignored, resulted in his two major works, one on French administrative law, *Theorie des französischen Verwaltungsrechts* (Strasbourg 1886), and the other on German administrative law, *Deutsches Verwaltungsrecht* (2 vols., Leipzig 1895-96; 3rd ed. Munich 1924). In the

first work he sought to interpret the often only implicit content of French administrative law to German jurists and in the second to apply his theoretical deductions to German conditions. The so-called doctrine of administrative law then dominant in Germany contented itself with a textbooklike classification of material according to ends and means, a treatment quite inadequate from a juristic point of view. Administrative law must have its general conceptual side, and this Mayer brilliantly developed. He opposed the private law interpretation of public legal relations, and since his time private and public law have been universally separated. The formation of the Weimar republic interrupted Mayer in his work on Saxon public law and on a theory deriving from Max von Seydel as to the legal nature of the German Empire as a league of sovereigns.

JOHANNES BÄRMANN

Consult: Wittmayer, Leo, "Otto Mayers Lebenswerk" in *Grünhuts Zeitschrift für das Privat- und öffentliche Recht der Gegenwart*, vol. xlii (1916) 517-34; Bühler, Ottmar, "Otto Mayers Deutsches Verwaltungsrecht (Zweite Auflage)" in *Verwaltungsarchiv*, vol. xxvii (1919) 283-313; Kaufmann, E., in *Verwaltungsarchiv*, vol. xxx (1925) 377-402; Jellinek, Walter, *Verwaltungsrecht*, Enzyklopädie der Rechts- und Staatswissenschaft, vol. xxv (Berlin 1928) p. 97-102, and further references there cited. A self-portrait of Mayer is to be found in *Die Rechtswissenschaft der Gegenwart in Selbstdarstellungen*, ed. by Hans Planitz, 3 vols. (Leipzig 1924-29) vol. i, p. 153-76.

MAYO-SMITH, RICHMOND (1854-1901), American statistician and social scientist. Mayo-Smith came under the influence of J. W. Burgess at Amherst and subsequently spent two years in graduate study at the universities of Heidelberg and Berlin. Upon his return to the United States in 1877 he became tutor in history at Columbia University and in 1880 was one of the five original members of the Columbia Faculty of Political Science. In the same year he gave the first course in statistics offered in any American university. Through the influence of this course, which he continued to give for twenty years, and through his pioneer textbooks in statistics he made important contributions to the development in the United States of the quantitative approach in the social sciences and to the teaching of statistics in American universities. He held that sociologists had exaggerated the complexity of social phenomena as compared to natural phenomena and had added to the difficulties of their science by indiscriminate collection of data and by the application of an

artificial terminology based largely on biological analogies; he argued that they should rather be content to seek simple relations of cause and effect, of coexistence and sequence, in social phenomena. In his widely quoted book on immigration he urged the control of immigration to exclude defectives, delinquents and immigrants possessing traits which may prove incompatible with American civilization; believing that the quantity of the current immigration threatened the political institutions of the United States and promoted economic disturbances he advocated also a cautious limitation of numbers.

GEORGE A. LUNDBERG

Important works: *Statistics and Economics*, American Economic Association, Monographs, vol. iii, nos. 4-5 (Baltimore 1888), reprinted as vol. ii of *Science of Statistics*, 2 vols. (New York 1895-99); *Statistics and Sociology* (New York 1895), constituting vol. i of *Science of Statistics; Emigration and Immigration* (New York 1890); a complete bibliography is found in Columbia University, Faculty of Political Science, *Bibliography, 1880-1930* (New York 1931) p. 8-10.

Consult: Seligman, E. R. A., "Biographical Memoir, Richmond Mayo-Smith" in *National Academy of Sciences, Memoirs*, vol. xvii (1924) 71-77, and "Richmond Mayo-Smith" in *Columbia University Quarterly*, vol. iv (1901-02) 40-45.

MAYR, GEORG VON (1841-1925), German statistician and sociologist. Mayr was appointed *Privatdozent* at the University of Munich in 1866 and was at the same time assistant to Hermann, head of the Bavarian Statistical Bureau. After Hermann's death he succeeded him and directed the bureau until 1879. During this period he greatly improved the methods of collection, preparation and publication of statistical data. He centralized Bavarian statistics in his bureau, introduced calculation by means of census cards in place of the stroke system, combined the publication of statistical material with a thorough scientific examination of the results and appended graphic descriptions to the textual discussions. In the 1870's as member of the commission for the further development of the statistics of the German Zollverein he was of decisive aid in the organization of the imperial statistics. From the end of 1879 to 1887 he was in Alsace-Lorraine as undersecretary of state in the department of financial administration. In 1891 he reentered the academic profession at the University of Strasbourg and from 1898 until his death was professor of statistics, finance and economics at the University of Munich. From this period dates his great work, *Statistik und Gesellschaftslehre*, of which the following

parts appeared: *Theoretische Statistik* (Freiburg i. Br. 1895, 2nd ed. 1914); *Bevölkerungsstatistik* (Freiburg i. Br. 1897; 2nd ed., 3 vols., Tübingen 1922-26); *Moralstatistik* (Tübingen 1909-17). From 1890 he edited the *Allgemeines statistisches Archiv*, of which seven volumes appeared under his direction up to 1906. In his contributions to this publication he treated primarily problems of economic statistics. His "Begriff und Gliederung der Staatswissenschaften" (in *Festgaben für Albert Schäffle*, Tübingen 1901; 4th ed. 1921, p. 325-90) attracted wide attention chiefly because of its thorough attempt at systematizing social sciences.

Mayr conceived of statistics as an independent science which has for its object the quantitative study of social phenomena based on mass observations with a view to discovering laws operating in social life. The theoretical part of statistics deals with the scientific basis as well as with problems of method and technique; the practical part treats of the positive results of statistical investigation in the various fields of social mass phenomena. While the epistemological basis of his work, particularly his doctrine of the statistical laws, has been subjected to severe criticism, his treatment of the particular branches of practical statistics remains essentially undisputed. Thus in his population statistics he perceived and elaborated without any use of mathematical tools almost all the problems which claim the interest of population theorists today. His general concept of *Moralstatistik*, under which he included statistics of divorce, suicide and crime, has often been attacked, but here too his treatment of the particular problems remains standard. Mayr also published numerous articles on taxation in Stengel's *Wörterbuch des deutschen Verwaltungsrechts* (2 vols., Freiburg i. Br. 1889-90).

RUDOLF MEERWARTH

Works: For an extensive list of Mayr's publications see article in *Handwörterbuch der Staatswissenschaften*, vol. viii (4th ed. Jena 1928) p. 1241-42.

Consult: Zahn, Friedrich, in *Allgemeines statistisches Archiv*, vol. xv (1925) 1-6; Bavaria, K. Statistisches Landesamt, *Geschichte der neueren bayerischen Statistik*, Beiträge zur Statistik des Königreichs Bayern, no. 86 (Munich 1914) p. 118-39.

MAZARIN, JULES (Mazzarini, Giulio) (1602-61), statesman of France. Mazarin, whose father was a Sicilian, was born in the Abruzzi, studied in Spain and entered the military and diplomatic service of the Roman Curia. Without ever taking orders as priest he advanced from

the rank of canon of St. John Lateran to nuncio at the French court and finally in 1641, at the instance of the French king, to the cardinalate. Through Richelieu, who was impressed by his diplomatic ability, he entered the diplomatic service of France and after Richelieu's death in 1642 became prime minister, a post which he continued to occupy during the regency following the death of Louis XIII in 1643. That he managed to control the government until his death despite the resistance offered by the bourgeoisie, the *parlements* and the nobility is to be explained by his intimacy with the regent, Anne of Austria, to whom he was probably secretly married. The sole interruption in his control occurred in 1651-52, when the revolt of the *Fronde*, which was occasioned by his deplorable financial administration, forced him into a year's exile.

Mazarin's principal achievements were in the realm of foreign policy. Carrying Richelieu's policy to its logical conclusion he succeeded by the Peace of Westphalia of 1648 in obtaining a kind of permanent protectorate over Germany for France and its allies, particularly Sweden; the peace effectively crushed the efforts of the Hapsburgs to achieve unity and supremacy and upheld the authority of the princes and the balance between the opposing religions in Germany. France's concrete gain from the peace was Alsace or more precisely a number of vague rights making possible the gradual acquisition of that province. In 1657 Mazarin further increased French influence in Germany by establishing the League of the Rhine, of which France became the mediating power, among the Rhenish archbishop electors and their neighbors. The peace had failed to conclude the war with Spain begun in 1635, and since 1648 France had been unable to rely on the support of the United Provinces against its enemy. But Mazarin's political realism and diplomatic skill enabled him in 1657 to win a new ally in Oliver Cromwell, despite the fact that the French king was the nephew of Charles I. As a result of this alliance he succeeded in imposing the Peace of the Pyrenees upon Spain in 1659. By the treaty he arranged a marriage between Louis XIV and the Spanish infanta Maria Theresa, although in so doing he had to thwart the love of his own niece for the king. In the conflicts between the Baltic states—Sweden, Denmark, Poland and Brandenburg—he played the role of peacemaker, causing France to guarantee the treaties of Oliva and Copenhagen in 1660.

Mazarin's policy led to the triumph of peace

on the basis of the preponderance of France on the continent. In this respect it may be characterized as a continuation of the policy of Henry IV and of Richelieu. But while his predecessors had been guided by a French sense of moderation, Mazarin, a foreigner and a political virtuoso rather than a servant of the nation, included two dangerous items in his legacy to Louis XIV: a covetous attitude toward German soil as a field for French territorial expansion and certain ambiguous clauses in the infant's contract which eventually led Louis XIV to advance his claim to the Spanish succession. Mazarin attained great wealth during his ministry and became an enlightened patron of the arts, a Maecenas of literature. Toward the French Protestants he adopted a discreet and cautious attitude, which prevented religious bigotry from resulting in open disputes. Mazarin's letters have been published in the *Collection de documents inédits sur l'histoire de France* (9 vols., Paris 1872-1906).

HENRI HAUSER

Consult: Chéruef, P. A., *Histoire de France pendant la minorité de Louis XIV*, 4 vols. (Paris 1879-80), and *Histoire de France sous le ministère de Mazarin, 1651-1661*, 3 vols. (Paris 1882); Lavissee, Ernest, *Histoire de France depuis les origines jusqu'à la Révolution*, vol. vii (Paris 1906) pt. i, p. 1-117; Robiquet, Paul, *Le cœur d'une reine* (Paris 1912); Overmann, Alfred, *Die Abtretung des Elsass an Frankreich im westfälischen Frieden* (Karlsruhe 1905); Silvagni, Umberto, *Il cardinal Mazzarino* (Turin 1928).

MAŽURANIĆ, VLADIMIR (1845-1928), Croatian legal historian. Mažuranić came of a family which had achieved prominence in statesmanship, scholarship and literature. After studying law at Vienna and Zagreb he was for forty-five years active in public service in Croatia as judge, as state attorney and finally from 1895 as vice president and later president of the Ban's Court, the highest court in the country. When Bosnia was occupied in 1875, he was appointed civil commissioner attached to the commander in chief and in that capacity applied himself to the reform of socio-political and feudal agrarian conditions in Bosnia and later to the organization and legal regulation of the old Croatian *zadruga*.

As a young man Mažuranić had written poetry, literary history and criticism; from the 1880's he began to devote himself to the legal history of the south Slavs. In 1902 in *O rječniku pravnoga nazivlja hrvatskoga* (On a dictionary of Croatian legal terms) he explained the need for

and the plan of his great life work, *Prinosi za hrvatski pravno-povijesni rječnik* (A dictionary of Croatian legal history), which appeared during the years 1908 to 1923 and which won him international renown. It was intended to contain all expressions, in published and unpublished Croatian legal records, legal writings and the vernacular, used or still in use to designate juristic persons, objects of actions at law, secular and spiritual callings, public, tribal, communal and family relationships. Such expressions were to be explained in terms of legal history, involving the use of the comparative or parallel laws of kindred peoples; and the explanation was also to contain the phrases used in the original sources. The monumental work lived up to its program. On the basis of a comprehensive knowledge of the legal history of the south Slavs, particularly that of the Croatians, and after investigation of available sources, an immense number of historical, political and legal topics and problems were thoroughly worked up by the comparative method. An abundance of verbal, theoretical and factual detail was drawn from philology, law and national and universal history concerning meanings, explanations and relationships. Mažuranić's dictionary supplied the thousand-year old Croatian constitutional law with its own proper and original documentation, while the establishment of a solid foundation for southern Slavonic legal history gave an enduring impetus to further research in that field. During the last years of his life Mažuranić investigated an interesting but little known subject—the relations of the Balkan Slavs, especially the Croatians on the Adriatic, to the Islamic world and the political, social and cultural significance and influence of a group of south Slavs at the courts and in the provinces of several of the old Islamic states. These studies, the most important of which is *Melek Jaša*, are lucidly condensed in German by Camilla Lucerna in *Südslaven im Dienste des Islams (vom x. bis ins xvi. Jahrhundert)*. Finally two other works by Mažuranić may be mentioned: *Hrvatski pravno-povijesni izvori i naša lijepa književnost* (Source of Croatian legal history and our literature) and *O 'Ligi naroda'* (The League of Nations).

JOSEF MATL

Works: "O rječniku pravnoga nazivlja hrvatskoga" in *Jugoslavenska Akademija Znanosti i Umjetnosti, Rad*, no. 150 (1902) 235-46; *Prinosi za hrvatski pravno-povijesni rječnik*, published by the Jugoslavenska Akademija, 10 vols. (Zagreb 1908-22, and supplement 1923); "Melek Jaša Dubrovčanin u Indiji godine 1480-1528 i njegovi prethodnici u Islamu prije deset

stoljeća" in *Zbornik kralja Tomislava u spomen tisuću godišnjice hrvatskoga kraljevstva* (Zagreb 1925); "Hrvatski pravnopovjesni izvori i naša lijepa književnost," and "O 'Ligi naroda'" in *Jugoslavenska Akademija Znanosti i Umjetnosti, Ljetopis*, vol. xxvi (1911) 81-146, and vol. xxxiv (1919) 65-82.

Consult: Lovrić, E., in *Mjesenik*, vol. li (1925) 455-57; Andrassy, J., in *Tragom Vladimira Mažuranića* (The work of Vladimir Mažuranić) (Zagreb 1928); Lucerna, C., in *Südslaven im Dienste des Islams* (Zagreb 1928) p. 3-5; Schmid, H. F., in *Zeitschrift der Savigny-Stiftung für Rechtsgeschichte, Germanistische Abteilung*, vol. xlviii (1928) 667.

MAZZINI, GIUSEPPE (1805-72), Italian patriot and political and social thinker. In his birthplace, Genoa, in France, where he organized young Italy in 1832, in Switzerland from 1834 to 1836 and in England, where he lived except for brief intervals from 1837, Mazzini wrote and worked for forty years in behalf of Italian political unification, to be accomplished by revolution and the creation of a republic based on universal suffrage. By summoning the lower classes to the struggle for the achievement of national unity, he sought to evoke the full force of the Italian nation, emancipating the patriotic movement from dependence on princes or privileged groups and on foreign intervention. At the same time Mazzini preached a new religious revelation. Influenced by the French romantics and by the Saint-Simonians, he reacted against the rationalistic and individualistic elements in eighteenth century thought; but from Rousseau he absorbed the principles of democracy and from Condorcet the doctrine of the indefinite progress of mankind, while inheriting from the Italian patriots the aspiration toward Italian political unity. Thus he developed an essentially intuitive view of divinely guided historical evolution, progressing through stages each marked by the revelation of a fragment of truth. Mankind was now approaching a new stage, designated by Mazzini as the "social epoch." Like its predecessors this epoch would be inspired by a new religion which should supersede obsolete Christianity. In the coming social epoch, mankind would be reorganized according to the principle of association. Since association required individual freedom and political equality, all nations would adopt a democratic and republican form of government. Freedom and equality were conceived, however, not as rights but as instruments necessary to the individual in order that he might perform the duty of participating in the mission of the group. Each nationality would form an independent

political unit, and all national states would be linked by one single moral law in the association of mankind. As regards the two main concrete obstacles to Italian national unification, Austria and the Papal States, the latter, along with the entire papal institution, would vanish with the acceptance of the new religion, while the heterogeneous Austrian Empire would be dismembered when the Italian revolutionaries called upon the various nationalities imprisoned within it to liberate themselves in accordance with the doctrine that each nationality should form an independent state. Although he criticized Marxism bitterly in later life both for its materialistic philosophical foundation and for its creed of the class war, Mazzini anticipated the natural disappearance of social classes in the epoch of humanity when economic activity would be organized on the basis of association and property identified with the fruit of toil. The basic principles of this doctrine Mazzini expounded particularly in his treatise *Doveri dell'uomo* (1840-43; tr. by E. A. Venturi, London 1862).

Mazzini's religion found adherents among a mere handful of people, chiefly English and many of them women. The workers' movement begun by his Italian followers in the 1860's under the inspiration of his social doctrines was equally unsuccessful, being swamped by Bakuninism between 1870 and 1880 and thereafter by Marxism. But in the attainment of Italian unification Mazzini's uninterrupted and uncompromising apostolate was a fundamental influence. Despite the failure of his various insurrectionary ventures, his propaganda for political unification and against any federalist solution of the Italian national problem paved the way for the sudden accord of 1859-60, when the monarchist-federalists renounced federalism, the republican-unitarians abandoned republicanism and all the patriotic groups joined in accepting a united Italy under the house of Savoy. His doctrines also provided direct inspiration for nationalist leaders in Poland, Bohemia, Rumania and Yugoslavia and influenced President Wilson in the development of his plan for reorganizing central Europe on a national basis. The political structure of post-war Europe bears more resemblance to the visions of Mazzini than to those of any of his contemporaries.

GAETANO SALVEMINI

Works: *Scritti editi ed inediti*, 18 vols. (Milan and Rome 1861-91); *Scritti editi ed inediti, Edizione nazionale*, vols. i-lx (Imola 1905-31).

Consult: King, Bolton, *Mazzini* (London 1902); Salve-

mini, G., *Mazzini* (4th ed. Florence 1925); Levi, A., *La filosofia politica di Giuseppe Mazzini* (2nd ed. Bologna 1922); Mondolfo, R., *La filosofia politica in Italia nel secolo XIX* (Padua 1924); Zanotti-Bianco, Umberto, *Mazzini* (Milan 1925), with bibliography of works on Mazzini; Vossler, O., *Mazzinis politisches Denken und Wollen*, *Historische Zeitschrift*, Beiheft, vol. xi (Munich 1927); Rosselli, N., *Mazzini e Bakounine* (Turin 1927); Griffith, G. O., *Mazzini, Prophet of Modern Europe* (London 1932).

MAZZOLA, UGO (1863–99), Italian economist. At a very early age Mazzola received his law degree from the University of Naples, where he had been taught by Antonio Ciccone, a disciple of Francesco Ferrara. In his early twenties he prepared in Germany a very accurate study of German workers' insurance for the Italian government and while there made the acquaintance of Adolf Wagner. Upon his return to Italy he received an appointment to the University of Camerino and in 1887 occupied the chair of public finance at the University of Pavia. After the death of Luigi Cossa in 1896 Mazzola was appointed also to the chair of political economy.

During his brief career Mazzola devoted himself to the theoretical study of public finance. The best of his various essays is *I dati scientifici della finanza pubblica* (Rome 1890). Opposed to the juridical concept of the state to which Sax subscribed, Mazzola accepted in part de Viti de Marco's idea of the state as a "cooperative" and regarded the state's financial activity as a form of cooperation undertaken by the individuals who comprise a national community. According to this conception they cooperate in order to procure for themselves the satisfaction of certain fundamental needs essential to the complete satisfaction of private needs at a cost lower than that which they would have to bear if they acted separately. The reason for the fiscal activity of the state therefore is neither the existence of the state as a person juridically superior to its citizens nor the conflicts between the various parts comprising the collectivity, conflicts which according to de Viti de Marco should be resolved by state action. In Mazzola's conception of private and public needs the relationship is one of coexistence not of succession. He opposed the view that public needs can be taken care of only after private needs or at least the most important of them have been provided for, because for the citizen to satisfy even his most elementary private needs it is necessary that at the same time the principal public needs, such as security, justice and transportation, be satisfied. Maz-

zola's work is characterized by the absence of dogmatic criteria concerning the functions of the state and their progressive extension. He merely explains the latter as a corollary of natural differences in human needs without expressing any opinion on whether or not such extensions are advantageous.

Also of interest are his chronicles published in the *Giornale degli economisti*, a review owned jointly by Mazzola, de Viti de Marco and Maffeo Pantaleoni between 1890–96 and still being published.

CARLO PAGNI

Works: *L'assicurazione degli operai nella scienza e nella legislazione germanica* (Rome 1885); *L'imposta progressiva in economia pura e sociale* (Pavia 1895); *La colonizzazione interna in Prussia*, Italy, Ministero di Agricoltura, Industria e Commercio, Direzione Generale dell'Agricoltura, *Annali di Agricoltura*, no. 224 (Rome 1900).

Consult: Pantaleoni, M., and Cabiati, A., "In morte di Ugo Mazzola" in *Giornale degli economisti*, 2nd ser., vol. xix (1899) 189–204; Griziotti, B., "Primi lineamenti delle dottrine finanziarie in Italia" in Regia Università di Pavia, *Economia politica contemporanea. Saggi di economia e finanza in onore del Prof. Camillo Supino*, Studi nelle Scienze giuridiche e sociali, vols. xiv–xv, 2 vols. (Padua 1930) vol. ii, p. 299–330.

MEAD, GEORGE HERBERT (1863–1931), American philosopher and social psychologist. After studying at Oberlin, at Harvard and in Germany, Mead joined the faculty of the University of Chicago in 1894 and remained there until his death. More brilliant in conversation than in writing, Mead exercised his greatest influence through personal contacts. By means of his rich personality and through his scattered essays he played an important part in the development of American social philosophy.

Although Mead's interests were wide and touched fruitfully the history and significance of science, the role of religion, the basis of politics and the claims of metaphysics, his central preoccupation was with the genesis of the self and the nature of mind. Mead took more seriously than most philosophers the task bequeathed to speculative thinkers by Darwin: the elaboration of a purely natural history of the psyche. He early enunciated the thesis (University of Chicago, *Decennial Publications*, 1st ser., vol. iii, pt. ii, 1903, p. 93) that the psychical is a temporary characteristic of the empirical interaction of organism and environment concomitant with the interruption of that interaction.

He thus set for himself the task of explaining the development of this discontinuous charac-

teristic of a continuing process into a functional mind or self. The essentially active nature of the organism furnishes the basis for this achievement. The capacity of the human organism to play the parts of others (inadequately described, he thought, as imitation) is the basic condition of the genesis of the self. In playing the parts of others we react to our playing as well. When the organism comes to respond to its own role assumptions as it responds to others it has become a self. From roles assumed successively and simultaneously there arises gradually a sort of "generalized other," whose role may also be assumed. One's response to this generalized role is his individual self. This self in its essential tonicity cuts out from the changing environment such objects as befit its needs and thus assimilates reality to its own pattern.

Short of this implied metaphysical thrust Mead furthered the pragmatic attempt to make intelligence both natural and moral by reading from his resolution of the psyche into a socius an optimistic future for social harmony.

T. V. SMITH

Works: *The Philosophy of the Present* (Chicago 1932). Until works now being published appear, Mead's writings are to be found scattered throughout periodicals, especially the *International Journal of Ethics* and the *Journal of Philosophy*.

Consult: Smith, T. V., "The Social Philosophy of George Herbert Mead" in *American Journal of Sociology*, vol. xxxvii (1931-32) 368-85; and "George Herbert Mead and the Philosophy of Philanthropy" in *Social Science Review*, vol. vi (1932) 37-54; Bittner, C. J., "G. H. Mead's Social Concept of the Self" in *Sociology and Social Research*, vol. xvi, no. i (1931-32) 6-22; Dewey, John, "George Herbert Mead" in *Journal of Philosophy*, vol. xxviii, no. 12 (1931) 309-14.

MEAT PACKING AND SLAUGHTERING

HISTORY AND AMERICAN DEVELOPMENTS.....LYNN RAMSAY EDMISTER

FOREIGN AND INTERNATIONAL ASPECTS.....FRANK M. SURFACE

E. L. THOMAS

SOCIAL ASPECTS.....MYRON W. WATKINS

HISTORY AND AMERICAN DEVELOPMENTS.

From earliest times meat has been a leading constituent in the diet of many peoples, but its importance has varied widely. In part this variation has resulted from differences in available supplies, while on the strictly demand side such factors as climate, religious belief, social customs, hygienic ideas, dietary standards and economic and social conditions have been contributory influences. Broadly speaking, religious rites and customs had a much greater effect in earlier times than they do at present, although they are still by no means negligible. Among the more familiar examples are the prohibition by the early Egyptians of the eating of pork as unclean and of cow flesh as sacred; by the Israelites of pork; by the Phoenicians of the meat of cows and hogs; and by the Hindus of cow flesh. In so far as abstention has rested historically on beliefs as to the sacredness of the animal, it has tended to persist to the present time, as in the case of the Hindus. The same is true with regard to religious bans based on the cleanliness of the animal, as in the case of the orthodox Jewish prohibition against the use of pork and its requirements in connection with kosher beef, wherein religious and hygienic considerations are merged. Among many of the orientals, and even in the Occident, religious tabus regarding meat eating still exert a marked influence on

the amount and character of meat consumption.

In the western world, however, the consumption of meat by the masses is much greater than in earlier times. This is in part due to the diminished influence of religious bans and restrictions. But in larger measure it has been the result of tremendous advances in the technique of meat production and distribution which have enabled the masses to consume, concurrently with the general rise in their living standards, more and better meat than was previously available to them. It is not commonly known how far the technique of production of meat animals has advanced in modern times. Not only were breeds of meat animals much smaller in antiquity and the Middle Ages, but in general the animals were apt to be thin and scrawny as compared with those which modern methods of feeding have made possible. It was not until the eighteenth century in England and the early nineteenth century in America that scientific breeding of cattle really began; and only in comparatively modern times has the progress in agriculture made possible the production of adequate feed supplies to fatten animals for slaughter on the vast scale which now prevails. Modern scientific breeding and feeding methods have resulted in the earlier maturing of animals and more rapid turnover; these advances have led to much greater efficiency in beef production

from the standpoint both of quantity and of quality. In other branches of animal husbandry progress has been similar.

No less important have been the effects of revolutionary changes in conditions and methods of slaughter and distribution. It was not until a little over a half century ago that the development of artificial refrigeration, coupled with the advent of more rapid means of communication, overcame the serious limitations upon distribution and consumption which had for centuries characterized the meat industry. Except in cases of conflict with religious beliefs, meat in earlier times was regarded as food for the rich. Yet the difficulties of preservation were such in preparing meat for consumption by the upper classes that the culinary art was mainly concerned with disguising the evil taste arising from decomposition. Indeed one of the chief supports of the spice trade of ancient and mediæval times was the demand for highly flavored sauces and condiments for this purpose. Gradually the development of better methods of preservation made possible more widespread consumption; but apparently consumption by the masses increased very slowly. Thus Dodd (*The Food of London*, p. 38) records that in England, except in the principal towns, as late as the fifteenth century the mass of the people received their chief supply of meat from the feudal barons and the rich monasteries; as there was little winter feeding, the animals were slaughtered in the autumn and put into brine, so that there was a large supply of salt meat for the nobility, while for the people salt fish was the staple winter food. It is certain, however, that long before the advent of refrigeration in the meat trade consumption of cured and salted meats had become fairly general. Nevertheless, the most striking advances have come within the past half century and have coincided broadly with the great scientific and technical progress in meat production and distribution and also with the era of industrialization and urbanization. Not only has the total slaughter increased enormously, but there have likewise been marked increases in consumption in most of the western nations. The statistics for these countries, especially those of several decades ago, are subject to many limitations; but they suffice to show the general trend since the close of the nineteenth century (Table I).

For most of the countries listed in the table the figures show distinct increases in per capita consumption since 1900; but if the earliest figure

TABLE I
ANNUAL PER CAPITA CONSUMPTION OF MEAT,
SELECTED COUNTRIES
(In pounds)

COUNTRY	YEAR OR PERIOD	TOTAL	BEEF AND VEAL	MUTTON AND LAMB	PORK AND LARD*
Argentina†	1899	140.0			
	1912-13	302.2	254.9	32.2	15.1
	1921-25	325.2	274.9	24.5	25.8
	1931	264.9	208.4	21.7	34.8
Australia‡	1902	262.6			
	1909-13	264.2	152.3	97.5	14.4
	1921-25	199.1	116.2	69.0	13.9
	1931	188.5	90.2	83.0	15.3
Belgium	1902	70.0			
	1912	85.8	41.6	2.0	42.2
	1921-25	76.8	43.5	1.0	32.3
	1931	89.1	39.0	1.3	48.8
Canada	1900	109.0	54.0	11.0	44.0
	1910	136.7	60.9	9.1	66.7
	1921-25	157.2	70.8	8.0	78.4
	1931	148.4	57.9	7.0	83.5
France	1904	79.0	43.0	9.0	27.0
	1909-13	105.7	49.2	9.5	47.0
	1921-25	92.7	48.0	6.9	37.8
	1931	100.7	53.0	7.5	40.2
Germany	1904	112.7	40.5	2.4	69.8
	1913	116.0	40.6	2.3	73.1
	1921-25	81.9	31.9	1.8	48.2
	1931	118.7	41.7	1.5	75.5
United Kingdom	1901-05	121.0	58.0	27.0	36.0
	1910-14	124.4	61.3	29.3	33.8
	1921-25	125.9	62.2	24.3	39.4
	1931	137.9	60.7	29.5	47.7
United States	1900	156.0	71.3	6.8	77.9
	1909-13	153.5	73.5	7.3	72.7
	1921-25	156.8	68.3	5.3	83.2
	1931	147.6	56.5	7.1	84.0

*For all countries, except the United States, lard is apparently not included in the earliest per capita figure, but it is included in the later figures. Separate figures for lard consumption in the United States are as follows: 1900, 13.2 pounds; 1909-13, 11.4 pounds; 1921-25, 13.9 pounds; in 1931, 14.4 pounds.

†The figures for 1912-13, 1921-25 and 1931 are for the Federal District of Buenos Aires only.

‡For New South Wales only, except 1902, which is an estimate for all Australia. The more recent figures for the country as a whole are somewhat fragmentary.

Source: The figures for the earliest year given under each country (except the United States) are from United States, Department of Agriculture, "Meat Situation in the United States," Department Report, no. 109 (1916) pt. I, p. 272-73. Figures for United States, 1900, and for Belgium, 1931, compiled by United States Bureau of Agricultural Economics. All other figures are from United States, Bureau of Agricultural Economics, *Foreign Crops and Markets* (Jan. 30, 1933) p. 88-91.

given under each foreign country does not include lard, then the real increase is exaggerated. In some cases correction of this possible error might indicate an actual decrease. In the United

States, for example, where the figures are comparable throughout, it is clear that per capita consumption has not increased but if anything has declined. The substantial gain in pork has been offset by the decline in beef. In Australia and Argentina, as representative of the newer countries, the figures show recent marked declines in consumption as compared with pre-war years. In Canada, however, chiefly because of great increases in pork consumption, the trend has been decidedly upward. It is not unlikely that in these newer surplus countries some of the consumption indicated in the earlier figures was not actual but included waste. In the industrial countries of Europe per capita consumption appears on the whole to have held its own since 1900. The inroads of the war period are reflected in the marked declines in Germany, France and Belgium in 1921-25 as compared with the pre-war years; but in all three all or most of this ground has now been recovered.

In addition there have been decided changes in the character of meat consumed in recent years, which in turn have exerted a marked influence on the livestock industry. Increasingly the demand for roasts and other large cuts has given way to a demand for smaller, more tender types of meat. In the United States the increased per capita consumption of pork, the well sustained per capita consumption of veal and the shift from mutton to lamb and from older to younger beef animals as sources of beef supply, all reflect this trend in some measure. From the standpoint of demand this shift in the type and quality of the meat in popular demand has encouraged the earlier maturing of animals for slaughter, better breeding, more intensive feeding, more rapid turnover of the herds and in general greater efficiency in livestock production. Conversely, however, the conditions of supply themselves have undoubtedly affected the trend of some of these demand factors.

In the United States meat packing dates from early colonial times. At first farmer packers cured and smoked meat for local use; but as the market grew both at home and abroad the industry became more specialized. In Boston and other seaboard cities the "packing" of meat for the growing local population and later for the West Indies, for seagoing vessels and for the plantation trade with the south became the basis of an established slaughtering industry. In the earlier years there was little actual packing, practically all of the meat being smoked or cured. But for the expanding maritime and plantation

trade there developed the use of pickled meat, which was barreled or packed. Hence, although the greater part of the meat prepared each year continued to be shipped in bulk, the term packing came to be applied to the entire procedure of preparing various kinds of meat for market.

The development of central slaughtering points was accompanied by the growth of livestock markets or fairs. To these the animals were driven overland from the outlying regions, often for long distances. One of the earliest and most celebrated of such fairs was the Brighton Cattle Market near Boston. As the livestock industry pushed westward after the revolution, these fairs were of great importance in the middle west as local markets where livestock (mainly cattle) was collected and driven over the mountains to the eastern markets by professional drovers. Gradually the fairs declined as the great central marketing and packing centers in the west began to emerge. Of these latter the first was at Cincinnati, and from 1830 to 1865 this city was the most important packing center. As hogs could not be driven long distances overland without great shrinkage, pork packing tended to develop close to the source of live supplies. Hence it was mainly pork packing on which the leadership of Cincinnati (dubbed "Porkopolis") rested, although this city was also an important point for assembling cattle for the eastern trade. Finally, with the opening of the cattle country west of the Mississippi and with the development of rail transportation there came the rise of the great central cash livestock markets and meat packing centers, with Chicago rapidly taking the lead.

Until the development of refrigeration meat packing was a highly seasonal industry. Packing operations could be carried on only in cold weather, and the shortness of the period intervening between the arrival of winter and the stoppage of navigation added greatly to the difficulties of the industry. On the side of technique the contrast with present methods was marked. The first packing plants were little more than general merchandise warehouses, being utilized for packing purposes only in the short cold season and requiring for equipment little more than the large vats in which the pickle was kept. Slaughtering was performed in separate establishments. The first packers were moreover largely commission merchants who packed on farmers' account. By 1850, however, slaughtering and packing were usually combined in the same establishment. Labor was almost entirely by hand, yet practically from the first the divi-

sion of labor reached a high point. There was relatively small utilization of by-products, especially in the earlier period, when the slaughtering was done in small separate establishments; indeed the disposal of the offal led constantly to conflicts with the public authorities concerning sanitation.

The early financing of the packing industry presented great difficulties, chiefly because of the long delay, usually from two to eight months, between the purchase of the live animals (which constituted from one half to four fifths the value of the finished product) and the sale of the meat. Large sums of cash were therefore required; indeed the power to command adequate supplies of money was an important factor in Cincinnati's early ascendancy. At first, when packers were mainly commission merchants for the farmers, little cash was needed; but as outright purchase developed the situation changed. From the beginning the western packers were compelled to rely heavily on eastern capital, and for such advances the terms were apt to be onerous by virtue of the highly speculative character of the industry. Prices varied widely between markets; estimates of the probable receipts of animals in a particular market were subject to considerable error; and the length of time likely to be required to dispose of the finished product as well as the price was extremely uncertain. Moreover the packers were chiefly men of small means and limited experience in the ways of finance. But as the leadership passed to Chicago, men of wider experience and better eastern connections came to predominate and the industry took on decided aspects of stability.

The turning point in the history of American meat packing came in the decades immediately following the Civil War, largely as the result of two factors. The first was the rapid growth of the railroads. The extension of rail transportation into the country beyond the Mississippi provided an impetus to the rapid development of the range livestock industry and made possible a heavy flow of stock, especially cattle, to Chicago and other centers. The second factor which revolutionized the entire industry was the advent of refrigeration and refrigerator cars, which transformed meat packing from a seasonal enterprise serving chiefly the needs of local communities into a year round industry located near the centers of livestock production and capable of shipping its products long distances.

Two groups of men were prominent in the

development of the industry after the Civil War. The first, consisting of persons who had had experience in the European packing industry and whose plants were originally established chiefly to engage in the export trade, included W. P. Sinclair, Samuel Kingan and Jacob Dold. The second, made up chiefly of men whose packing business originated in the middle west, included P. D. Armour, G. H. Hammond, Nelson Morris, G. F. Swift and Michael Cudahy. Morris had begun his packing operations in Chicago in 1859; Armour, moving from Milwaukee, appeared in Chicago in 1868; Hammond's rise dated from 1869 and Swift's from 1875. Swift, however, had earlier built up a packing business in the east. In 1887 Cudahy, for many years associated with Armour, began to operate an independent plant at Omaha. These names have ever since been closely linked with the industry.

The growth of packing after the 1880's was greatly accelerated by the development of the dressed beef trade. In 1868 Hammond had made some winter shipments of dressed beef to eastern markets; but it was not until 1875 that artificial refrigeration came to be used successfully. First Swift and Hammond, then Armour and soon others began to develop the refrigerated beef trade, which by 1880 had attained an appreciable volume. Its distinct economies as compared with the cost of shipping live animals (the latter involving not only loss of weight in handling but also added costs arising from transporting on the hoof the low valued by-products which made up nearly one half the weight of the animal) tended to hasten the growth of the trade. Nevertheless, because of the opposition of the railroads to this traffic, public prejudice and legal restrictions it was not until 1890 that the trade became securely established. With it had come an entirely new kind of distributing organization, based on branch houses and "peddler car" routes, the latter being employed to distribute fresh meat at smaller points along the railways directly from the refrigerator cars to any who wished to buy. The year 1890 likewise saw the inauguration of a federal meat inspection service. By this time also progress was being made in the introduction of chemical control in the packing industry, making possible much more extensive utilization of by-products, better standards of quality and similar developments.

The combination of factors to which reference has been made early gave Chicago an ascendancy in the packing industry which it has never re-

linquished. But the development of the trade in fresh meats encouraged the extension of the industry into other parts of the west located still nearer to the centers of livestock production. Plants were established in St. Louis, Kansas City, Omaha, St. Joseph, Sioux City, St. Paul and other cities, many of them as branches of the Chicago houses. In 1890, according to the census, meat packing establishments located in five cities—Chicago, Kansas City, Omaha, St. Joseph and St. Louis—accounted for 69 percent of the total domestic cattle slaughtered, 49 percent of the hogs and 52 percent of the sheep. Chicago alone contributed 30 percent of the cattle slaughter, 23 percent of the hogs and 30 percent of the sheep. In 1904, according to the census, about three fourths of the slaughtering in the United States was done in the middle west, 60 percent being handled at the few large packing centers in the area. Six large companies had emerged—Swift and Company, Armour and Company, Nelson Morris and Company (later Morris and Company), Cudahy Packing Company, Schwarzschild and Sulzberger Company (later Sulzberger and Sons and after 1916 Wilson and Company, Inc.) and the National Packing Company. The first five of these later came to be known as the Big Five; the last named was actually controlled by Swift, Armour and Morris.

As has been pointed out the process of concentration in the meat packing industry was rapid beginning with the 1890's, the chief influence in this direction being the advent of refrigeration. Distribution on a national and even on an international scale led to still more intensive concentration; it required a large amount of capital, since it involved elaborate marketing organization and equipment, including the establishment of branch warehouses in the larger cities and ownership of lines of refrigerator cars. Moreover there were marked advantages in large scale organization from the standpoint of the profitable utilization of by-products. Especially did these conditions favor concentration of control in respect to beef, partly because of the larger sales machinery required in marketing fresh beef and partly because the thorough utilization of by-products, which constituted some 45 percent of the live weight of cattle as against 25 percent of that of hogs, was possible only when the process was conducted on an elaborate scale.

The World War gave great impetus to packing. The heavy demand for canned and cured beef and pork products to feed the armies of

the United States and the Allies led to a marked expansion in both the livestock and the packing industries. As a result of wartime difficulties of communication with South America and Australia much of the demand centered in the United States. Thus from a few million pounds before the war American beef exports including beef products rose to 782,000,000 pounds in 1918, while pork products exports rose to 2,250,000,000 pounds in 1918 and to 2,638,000,000 in 1919. Thus the rates of earning in the industry during the war period were virtually trebled.

Detailed information concerning profits in the packing industry through the years of the World War was published by the Federal Trade Commission in 1920. Figures for the Big Five, ascertainable for varying periods of their history (for Armour and Cudahy from their founding in 1868 and 1887 respectively; for Swift from 1896 with partial data from 1885; for Wilson from 1894; and for Morris from 1909), indicated a net aggregate profit, for the group, of \$504,298,000, out of which dividends and drawings of \$163,013,000 were paid, leaving \$341,285,000 for reinvestment in the industry, with only \$126,638,000 of new cash capital subscribed. From 1912 to 1917 inclusive the annual rates of net profit of the Big Five (after deduction of interest as an expense) as based on net worth (capital stock and surplus) were as follows: 1912, 8.1 percent; 1913, 7.0 percent; 1914, 8.3 percent; 1915, 12.8 percent; 1916, 18.5 percent; 1917, 26.5 percent; in 1918 the reported rate of profit on net worth to the United States Food Administration was 15.0 percent. The huge increase in livestock and meat production during the war had led to such serious overexpansion that heavy losses were suffered during the post-war recession of demand and prices. For the fiscal year 1921 alone these were alleged by the packers to have been over \$61,000,000, of which Armour's loss was placed at nearly \$32,000,000. The 1920's therefore saw widespread financial reorganization and consolidation in the whole industry, the reorganization of Armour and Company (including the Armour-Morris merger in 1923) and of Wilson and Company, Inc., being outstanding developments. A summary view of the evolution of the industry since 1869 is offered in Table II.

Despite the great increase in interstate packing during recent decades a very considerable part of the total amount of meat slaughtered in the United States still consists of local and farm killings. Although its precise size cannot be de-

TABLE II
MEAT PACKING INDUSTRY IN THE UNITED STATES, 1869-1931*

YEAR	NUMBER OF ESTABLISHMENTS	WAGE EARNERS†	WAGES	COST OF MATERIALS, CONTAINERS FOR PRODUCTS, FUEL AND PURCHASED ELECTRICAL ENERGY	VALUE OF PRODUCTS	VALUE ADDED BY MANUFACTURE
				In millions of dollars		
1869	768	8,366	2.6	61.9	75.8	14.2
1879	872	27,297	10.5	267.7	303.6	35.8
1889	1118	43,975	24.3	481.0	561.6	80.6
1899	882	68,386	33.4	682.1	783.8	101.7
1904	929	74,134	40.3	805.9	913.9	108.1
1909	1221	87,813	50.4	1191.4	1355.5	164.1
1914	1279	98,832	62.1	1441.7	1652.0	210.3
1919	1304	160,996	209.5	3782.9	4246.3	463.4
1921	1184	117,042	152.9	1868.2	2200.9	332.7
1923	1397	132,792	167.6	2176.0	2585.8	409.8
1925	1269	120,422	159.4	2625.2	3050.3	425.1
1927	1250	119,095	161.6	2663.7	3057.2	393.5
1929	1277	122,505	165.9	2974.1	3434.6	460.5
1931‡	1209	106,594	134.4	1837.6	2177.2	339.7

*Data for establishments with products under \$5000 in value included for 1919 and prior years but not for 1921 and subsequent years. The data for 1889 and previous years are not strictly comparable to those of 1899 and subsequent years because of changes in classification.

†Average for the year.

‡Preliminary.

Source: United States, Bureau of the Census, *Biennial Census of Manufactures, 1921 (1924)*; *Manufactures: 1929, Industry series, Meat Packing and Related Industries (1931)*; *Manufactures: 1931, Meat Packing, Wholesale (Preliminary Report) (1932)*.

terminated, official estimates in 1931 placed the meat output not subject to federal inspection at 5,729,000,000 pounds out of an estimated total from all slaughter operations of 16,777,000,000 pounds. There is, however, a large amount of federally inspected meat which by its very nature tends to foster a considerable measure of geographic decentralization in packing. Nearly half the beef consumed in New York City and vicinity, for example, is derived from animals slaughtered locally for the kosher, or orthodox Jewish, trade. Since consumption within three days after slaughter is one of the religious requirements, the killing must be done locally and under the supervision of the rabbinical authorities. Only the fore quarters of the animal are kosher; but the remainder is available for the non-Jewish demand. The same factor accounts for a certain amount of local slaughtering in other cities in the east.

Another factor which tends to prevent complete concentration in the great packing centers is freight and marketing costs. Savings in freight rates, both on live animals and meat products, have always made it possible for the so-called local, independent packers to compete with the big packers within limited areas. In recent years, because of low prices of livestock on the one hand and the continuance of high freight and marketing costs on the other, the growth of

small packing plants scattered throughout the territory beyond the Mississippi has been perhaps the most striking development in the entire industry. In pork and lamb and even in beef slaughtering in the great packing centers has suffered a relative decline. This development, however, appears to have represented a tendency toward decentralization of operation rather than of ownership. A number of local plants throughout the region between the Mississippi and Missouri rivers have been acquired by the big national packing firms, which now slaughter locally much livestock which would formerly have been slaughtered in their large city plants. Careful inquiry has revealed that the percentage of livestock slaughtered in plants owned by the large national packers has not actually been declining.

It is to be noted despite these considerations that there is much greater geographic concentration in the United States than in Europe. In European countries most of the slaughtering is in smaller establishments and much of it in public abattoirs. In England and Wales alone, for example, there are over 20,000 privately owned local slaughterhouses, although in the larger cities there are also public abattoirs. In Germany and France commercial slaughter takes place almost entirely in public abattoirs. In Denmark bacon factories are cooperatively

owned by the farmers. In Australia and especially in New Zealand public abattoirs or meat works and public stockyards predominate. In both countries also slaughtering on farmers' account is widely prevalent.

In its economic characteristics the American packing industry presents a number of striking features. Essentially the packer is not engaged in production but in distribution, for by far the greater part of the value of his product is the cost of his raw material, or livestock. More than half the large packer's expenses are for freight and selling, and receipts from by-products alone largely offset the total cost of slaughter and distribution. The plant operations may therefore be looked upon simply as processes preparatory to the distribution of meat and by-products in a more economical way than that afforded by the earlier method of sending the live animals to the consuming centers. Again, the nature of the packer's operations presents many cost accounting complexities. Like the flour miller and the oil refiner, the packer is engaged in "disassembling," as it were, a raw product; and from the time this process starts until the final disposal of its many parts to the ultimate consumer the problem of allocation of costs among the different products is constantly present. In beef packing it is largely one of major versus by-product costs; in pork packing it is mainly one of joint costs. The possibilities offered for concealment of profit through the particular accounting practices adopted under these complicated conditions have been a subject of no little controversy between the packers and the public authorities. Finally, it is worth remembering that much of the product of the industry is highly perishable.

The character and relative importance of the numerous products derived from the live animal present many variations. The dressed yield of beef averages 55 percent of the live weight; in the case of pork it is 75 percent, in that of lamb, 48 percent. Some beef is canned, but the overwhelming portion is sold fresh. About 40 percent of the pork and virtually all of the lamb are sold fresh. Fresh meat must be chilled to a low temperature for distribution; but because of the popular distaste for frozen meat in the United States very little of it is treated in this fashion. In Europe, on the other hand, large quantities of frozen meat from overseas are consumed.

The by-products of the industry fall broadly into two groups: the edible and the inedible. The edible products include hearts, livers, brains, tongues and the like; and also lard, oleo

oil and oleo stock, stearin, edible tallow and other edible fats. The inedible products include hides and skins, pulled wool, products from the sinews, fats, blood, products from glands and viscera, products from bones and pharmaceutical products. The main by-product lines or outlets are leather, brushes, oleomargarine, soap, sausage casings, strings, ligatures, glue, gelatin, animal and poultry feeds, commercial fertilizers and pharmaceuticals. According to R. A. Clemen (*By-products in the Packing Industry*, p. 9), the proportion of income from by-products varies as follows: from hogs 3.4 percent; from sheep 18.6 percent, of which 14.5 percent is from the pelt alone; from calves 7.2 percent; and from steers 12.7 percent, of which 8.6 percent is from the hide.

The technical advance of the industry since the latter part of the nineteenth century has been rapid. The modern large scale packing and distributing concern is an elaborate and complicated organization. Functionally it is concerned with four main enterprises; namely, slaughtering and packing, the specialized manufacture of by-products, the storage of products and distribution. These functions in turn may include many lines of subordinate or collateral activity. Thus the packing departments, besides slaughtering and preparing the cuts, may be engaged in making sausages and in canning meats. A soap factory may be operated to utilize inedible greases, an oleomargarine factory to utilize edible oils. Packing or merchandising of poultry and dairy products may be taken up as an allied line.

Division of labor is carried to a high point. Many of the workers, such as the cattle butchers, must be highly skilled; but fully two thirds of the operations require only unskilled labor. In some branches of the industry, as in the trimming and sausage rooms and in the cooking and canning departments, women are employed as well as men. The average earnings per hour of males in all occupations in the industry increased from 27.1 cents in 1917 to 51.1 cents in 1921, dropped to 49.9 cents in 1923 and then increased gradually from year to year until 52.5 cents was reached in 1929. Women's earnings have been considerably lower. In 1917 the average wage per hour for women was 17.8 cents; it reached 36.5 cents in 1921, fell to 36.1 cents in 1923 and to 35.9 cents in 1925 and then mounted to 36.9 cents in 1929. The spread in earnings, based on operations performed, may be noted from the following comparative data. In 1929 average earnings per hour of males (exclusive of

doormen, bricklayers and masons) ranged from 42.7 cents for truckers in the fresh pork cutting department to 88.2 cents for floormen or siders in the cattle killing department; for females the range was from 31.1 cents for cap setters in the canning department to 42.9 cents for workers in the offal department. The average full time hours per week of males and females in all occupations increased from 48.4 in 1921 to 52.3 in 1923 and decreased gradually from year to year to 49.2 hours per week in 1929.

Despite the technical advances achieved seasonal employment is still a prime characteristic of the industry. In the words of Dr. Herbst (*The Negro in the Slaughtering and Meat-Packing in Chicago*, p. 10): "Throughout 'Packingtown' the busiest season is about the last week in November, during December, or early January. Lay-offs begin then and the depression lasts through the summer months. Ordinarily in July or August the run of livestock picks up. Workers who have been transferred to other departments are then restored to their original positions and wage-earners are taken on until the peak of employment is again reached. Although the magnitude of variation between these periods of high and low employment has been lessened, they have not been eliminated and recur annually." While in recent years the packers have been guaranteeing pay for 40 hours in any one week to those who are kept on the pay roll, in actual practise but few workers enjoy this modicum of regularity; these are the trained operators, who procure jobs during the slack season by interdepartmental transfers. As for the common laborers, they have come to regard periodic layoffs as a condition of employment in meat packing and slaughtering.

As in other industries, labor productivity in meat packing increased markedly during the period 1914-31 as a result of elimination of waste motion, change of layout rendering unnecessary the transfer of the product from one part of the plant to another during processing, combination of two jobs and adoption of workers' incentive plans. In a study made by the United States Bureau of Labor Statistics of certain departments of three large establishments, employing in 1931 an average of 2072 men, it was found that from 1914 to 1931 productivity per man hour had increased 5.7 percent in the cattle killing department, 33.2 percent in the hog killing department, 21.1 percent in the hog cutting department, 41.6 percent in the calf killing department and 61.0 percent in the

sheep killing department. There was naturally a corresponding loss in employment opportunities. It would have required 2585 men working at the 1914 rate of productivity to do the jobs performed in 1931 by 2072 workers; this represented a loss of 513 full time jobs, or 19.8 percent.

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FOREIGN AND INTERNATIONAL ASPECTS. In Argentina although the first shipments to Europe of frozen beef occurred as early as 1877 meat packing was not commercialized until the beginning of the present century, when British capital was attracted to it. This was largely because improvements in methods of refrigeration made it possible to keep meat in edible condition during the long voyage to European markets. British owned *frigoríficos* (refrigerated packing houses) met no serious competition until the advent of American packers in 1908; within a short time the four leading American firms (Swift and Company, Armour and Company, Morris and Company and Sulzberger and Sons Company) owned plants in Argentina. Thanks to the payment by the packers of price premiums for animals of superior quality *criolla*, or native, scrub stock was almost entirely eliminated except in those sections which were economically inaccessible to the export *frigoríficos*. Through control of market prices the packers were thus in a position to enforce and to obtain the requirements of their consumption markets. Up to the end of the World War, during which Argentina played an important role in the provisioning of allied troops, producers and packers thrived; but the following period of deflation caused widespread discontent and gave rise to agitation for a government owned packing plant. After 1923 measures were enacted for the establishment of a national *frigorífico*, the fixing of maximum and minimum prices to be paid for cattle by the private *frigorífico* operators and the obligatory purchase of cattle on a live weight basis. The law establishing price control was suspended following the shutting down of the private plants; but the continuance of the depression in the industry has prompted cattle breeders to appeal to the Argentinian government for relief in order to insure higher prices to producers and close governmental supervision of the packing industry. Argentina possesses also an extensive sheep industry, the marketing of the animals being largely in the hands of foreign interests, which are predominantly American.

In Uruguay the development of the packing industry followed a course not unlike that in Argentina, except that foreign capital appeared at a somewhat later date. From 1906 to 1921 year to year operations of the export *frigoríficos* reflected no changes of marked significance. In 1921 slaughterings were more than double the amount in 1920 and afterward they increased annually, until in 1929 they reached the high mark of nearly 1,500,000 head. The plants under foreign control are three in number. A fourth plant, which was native owned, ceased to operate in 1929 and was subsequently acquired by a government owned corporation. Apparently government operation has not been attended by financial success, for early in its career the plant was reported to be losing nearly \$2 per head of cattle slaughtered.

Although Brazil has a larger cattle population than Argentina, Brazilian herds have not reached the high standard of Argentinian and Uruguayan cattle and the meat products of that country do not play a prominent part in English and continental markets. There are four American freezing plants in the state of Rio Grande do Sul and two in the state of São Paulo; in São Paulo British interests operate two plants and own extensive ranch properties in two adjoining states for the supply of cattle. On the other hand, no Brazilian company is engaged in the preparation of beef for export.

The existence of a community of interest between Argentina, Uruguay and Brazil led to the calling of a conference at Montevideo in December, 1931, for consideration of common economic problems. Two resolutions were adopted: first, that each country should continue to develop its own commerce in meats but along lines which would permit of common action; and, second, that two delegates be appointed from each country to constitute a joint mission for the study of the foreign trade in meats and to coordinate measures for insuring its protection. At a second meeting of the conference in November, 1932, the decision was reached that each country's quota of chilled beef, as eventually fixed by the British government, should be distributed among the packers by the governments of the respective countries rather than by agreement among themselves.

In Australia prior to 1860 cattle and sheep were killed only in sufficient numbers to supply the limited local demand for fresh meat. Commercialization of the industry began with the opening of meat canneries in the 1860's, and

refrigeration was first adopted in 1883 as a medium for placing Australian mutton on the English market. In that year several cargoes of mutton and lamb were shipped to England, and shortly thereafter works were erected for the preparation of frozen meat for export. Plants specializing in beef export are for the most part centered in Queensland, where approximately 50 percent of Australian cattle is located. During the past several years high labor costs, heavy interest on capital investments and oversea transportation expense, resulting in losses to producers and packers alike, have exerted an influence toward the elimination of some of the smaller establishments. Short term leaseholds on grazing land have injected a factor of uncertainty into the cattle industry and prevented many producers from improving herds and properties which logically might have brought more adequate returns. In addition to the eight export plants in Queensland some thirty-five concerns at Brisbane slaughter cattle for the local and state fresh meat trade. Indications at present point to the eventual acquisition by the state of the majority of the latter group of establishments; in fact in 1930 the government carried its intention into partial execution with the purchase of the largest export meat works from Armour and Company. English interests are heavily represented not only in the export meat industry of Queensland and elsewhere in Australia but likewise in steamship lines carrying meat supplies to the English and continental markets. Municipal or state abattoirs are maintained in Adelaide, Melbourne, Sydney and Newcastle. At the present time only one government owned meat works in Western Australia, located at Wyndham, is engaged in the slaughtering of cattle for export. Lack of even rainfall throughout the year, the abundance of ticks, excessive charges on investments, inadequate interior transportation facilities and a vast area of arid land all tend to retard cattle production. A drawback to the development of the export meat industry has been the failure to perfect a reliable system of low temperature refrigeration which would assure satisfactory preservation of chilled beef throughout the long ocean journey to the United Kingdom. Slaughtering of sheep and lambs for export is confined mainly to the states of New South Wales and Victoria. During the fiscal year 1929-30 the number of sheep killed in the former state was nearly 60 percent of the total while a little less than 25 percent of the lambs was prepared in

that state. Victoria in the same year handled about one third of the sheep and two thirds of the lambs.

New Zealand's entry into the meat export trade was simultaneous with that of Australia; prior to that time commercial utilization of the large sheep population of the country was limited, as in the case of Australia, to melting down the tallow derived from the carcasses. Sheep were raised principally for their wool. The comparative importance of the different branches of the export meat industry is indicated by the fact that, in the fiscal year 1928-29, 68 percent of the shipments consisted of whole lamb carcasses, 20 percent of whole mutton carcasses, 6 percent of frozen beef, 3 percent of pork products and 3 percent of potted and preserved meats and sausage casings. The industry is closely controlled by a government agency, the New Zealand Producers' Board, established in 1922; its powers are broad, the chief being the grading of meat, regulation of shipments to insure supplies in accordance with market demands, foreign advertising, the securing of cargo space and supervision of loading operations. In addition a corps of inspectors is maintained in the United Kingdom to exercise surveillance over the discharge of shipments and to check on condition, quality and the like. Sheep and lamb freezing works are located in the port cities. There are no subsidiaries of American packing companies in the dominion; and while English capital is represented, most of the works are owned by citizens of New Zealand.

In Canada the organized meat packing industry, which had been established just a little later than that of the United States, has become the country's second most important industry. In 1930 the value of the capital investment in Canadian meat packing was nearly \$61,000,000 and the total kill of food animals under government inspection was very close to 4,000,000 head. The financial success of meat packing in Canada has been due largely to the utilization of by-products; in this sense it has been guided to a very large extent by American packing practices. A Canadian subsidiary of Swift and Company operates plants in all the provinces save Prince Edward Island and Nova Scotia. Canada depends to some extent on its export trade with the United Kingdom, the British West Indies, Newfoundland and the United States for outlets for its surplus meats and animal fats. The bulk of the trade is with the United Kingdom, and exports have quite as diversified a character as

those from the United States. The total value of the Canadian output of meats, animal fats and related by-products was in excess of \$185,000,000 in 1929, declining 11.8 percent the following year.

The original importation of pedigreed cattle into south Africa in 1870 was the first effort toward the improvement of cattle standards. Since 1910 marked strides have been made in the direction of herd improvement, these advances being concurrent with a realization on the part of farmers of the greater possibilities in better bred stock. For the Union of South Africa as a whole cattle ownership is about evenly divided between European and white farmers on the one hand and natives on the other. Municipal abattoirs are located in such centers as Johannesburg, Durban and Cape Town as well as in the smaller cities of Bloemfontein, Pretoria, Germiston and Pietermaritzburg. In fact throughout the union most of the slaughtering of food animals is conducted as a municipal, town or village enterprise. The export meat industry is controlled to a considerable extent by the British owned Imperial Cold Storage Company, which is financially interested in plants at eleven strategic points in the union. The government itself operates two cold storage plants in Cape Town and Durban; these were designed to hold fresh meat supplies for local consumption, but occasionally they store meats intended for shipment overseas. American packing interests are not represented in the Union of South Africa. Until recently the various operators of cold storage plants and the one outstanding firm in particular have confined their export activities to the filling of government contracts with Mediterranean countries, notably Italy. Only since 1931 has attention been directed toward the development of an organized meat export industry. One of the chief reasons for this neglect has been the recognition of a growing preference on the part of European consumers, especially in England, for chilled rather than frozen meat. Pending further advances in refrigeration South Africa's distance from the major consuming markets of Europe places the union under a handicap in this respect. The government in 1923 passed a beef export bounties act authorizing the payment of 1½ pence per pound of beef exported. In the Union of South Africa there are close to 50,000,000 sheep; but since these are principally wool type breeds, slaughter for meat purposes is limited to local market demands.

There is no beef cattle industry in Denmark. The Danish swine industry has been a development concurrent with the expansion of the dairy industry, which is a mainstay of Danish agriculture. In 1931 bacon was the chief meat produced by the 61 cooperative plants and the 22 privately owned slaughterhouses. Seven million hogs were slaughtered in 1931, the cooperative establishments being responsible for 6,100,000 of these. The so-called bacon factories prepare this product for the market by salting the sides after the removal of the head and first joint of the legs. England receives the entire exportation and it is here that the smoking of the bacon for consumption is completed. The Danish cooperative factories first made their appearance in 1887. Less than 11 percent of the bacon and by-products of the cooperative factories is consumed in Denmark. Because of the importance of the export trade therefore 18 factories have combined to sell their bacon to a general agency in London, called the Danish Bacon Company, Ltd. This firm, it is estimated, handles from 30 to 33 percent of all the Danish bacon exported and in turn disposes of the product direct to large retail dealers. The various cooperative plants are organized into an association called the National Federation of the Danish Cooperative Bacon Factories, which serves the mutual interests of the members particularly in matters related to necessary commercial and legislative reforms. The average number of members belonging to this association has been 180,000 individual farmers or from 3500 to 3700 members per factory.

The Soviet Five-Year Plan contemplated extensive reorganization and development of the country's livestock industry, the impelling motive being the increase of the production of meats for domestic use. To this end the Soviet government purchased abroad large numbers of pedigreed and grade sheep, swine and cattle, established breeding farms and enlisted the services of a corps of foreign animal husbandry experts. While by 1932 the program was fairly well launched, the expected progress was not realized because of mismanagement of the farms, inefficiency of personnel, unsatisfactory care of livestock and inadequate organization of labor. A revision of plans as affecting different phases of the livestock industry was, however, under way. As an essential corollary to the livestock industry the Soviet government set out to modernize its meat packing industry and to construct a series of complete packing plants located

strategically with reference to sources of supply and markets. Some of these units were especially designed for preparation of export meat cuts and by-products. There has been some sporadic exporting of cured and refrigerated meats, but thus far the Soviet Union has not been in a position to take a permanent place in the ranks of meat exporting countries and in all likelihood many years must elapse before it can do so. There have been substantial annual increases in the livestock population of Soviet Russia, but information relative to the numbers of head which have found their way to slaughtering establishments is not on record. Sheep raising in particular appears to be flourishing; the recent report of the president of the Sheep Breeding Trust stated that the number of sheep had increased to 2,700,000 head on state and collective farms by the end of December, 1930, as against 1,100,000 for the preceding year. By December 31, 1931, the number had increased to 4,800,000 head and it was expected to reach a total of 7,300,000 on December 31, 1932.

The United States, Denmark, Argentina, the Netherlands, New Zealand, Australia and Uruguay are, in the order of the value of their trade in 1929, the major exporting countries of meat products; the Irish Free State, Brazil and Canada are minor exporting countries. The following figures give the value, in terms of United States dollars for 1929 (except when otherwise indicated), of the export trade in meats and animal fats of the chief surplus meat producing countries of the world: United States, \$202,822,000; Denmark, \$144,689,000; Argentina, \$140,375,000; the Netherlands, \$68,990,000; New Zealand, \$55,417,000; Australia, \$33,576,000; Uruguay (1928), \$29,381,000; Irish Free State, \$23,174,000; Brazil, \$16,753,000; Poland (1930), \$12,500,000; Canada, \$10,584,000. The United States runs little risk of losing first place to Denmark, largely because it exports a widely diversified range of meat products while Denmark has specialized almost exclusively in bacon. In 1929 American lard exports, the most important single meat product shipped abroad, had a declared value of but 50 percent of that of all exports in the meat group. Pork meats ranked second, the principal items in this group being cured meats largely for the United Kingdom, pickled pork for the West Indies and canned pork for the United Kingdom. Other meat exports in recent years have been miscellaneous meats, consisting mostly of edible offal, going to the United Kingdom, the Netherlands and

Germany; sausage casings; neutral lard; and oleo oil and inedible animal oils and greases.

As an exporter of chilled beef the United States received a definite check during the latter part of the first decade of the twentieth century. The mounting value of its open range lands had led gradually to the substitution of crops for livestock raising in many of the western states, while the opening of Argentinian and Uruguayan *frigorificos* by American and British groups forced American beef from the British and continental markets. The keen rivalry which ensued in Argentina between the American owned plants on the one hand and the British controlled companies on the other led in 1911 to the formation of a shipping pool, which fixed definite quotas for each shipper. The American houses were assigned 42 percent of the total volume in this first pool; by 1914 they were handling 63 percent of the shipments. Further changes in the respective quotas of American and British plants were made as years went by, but dissatisfaction with the distribution of quotas led to a price war in 1926 which proved disastrous for all concerned. Until a means is discovered of reducing present refrigeration costs and improving existing facilities, it is improbable that Australia, New Zealand or South Africa will be able seriously to challenge the commanding lead of Argentina in the exportation of chilled beef, which began to supplant frozen beef in the Argentinian export trade in 1910. Since the World War chilled beef has gained the ascendancy over frozen beef. Above five eighths of all meat product exports from Argentina in 1929 in terms of value consisted of chilled or frozen beef; an annual average in any normal period would vary but little from this percentage. Canned meats, chiefly tinned corned and roast beef, came second and frozen mutton third. In relative order of subsequent importance were tallows and greases, frozen sausage, meat extracts and sausage casings. The United Kingdom was by far Argentina's best customer, only small quantities being shipped to other European markets. Argentina offers some promise in the future of becoming an exporter of pork meats, as is indicated by the growing importance of its maize crop and the trend toward small land holdings.

In Uruguay chilled and frozen beef, the former leading in tonnage, represented almost 50 percent of the meat product exports according to 1928 values; canned meats were a close second. In recent years the United States has been

increasing its imports of canned meat from Uruguay. Other meat products shipped abroad are chilled mutton, jerked beef, animal tallow and greases and meat extracts. The United Kingdom takes a large proportion of all these exports, except jerked beef, which goes to Cuba and Brazil; recent Cuban tariff increases, however, have brought about a drastic curtailment of export volume. With the exception of chilled or frozen beef, which amounted to practically 70 percent of the gross value of meat products exported in 1929, Brazil cannot lay claim to special recognition as a surplus meat producer at the present time. Nevertheless, the concentration of the cattle industry in the south central and extreme southern states of the country is favorable to the extension of an export trade from the viewpoints of climate and convenience to coastal ports.

The Netherlands has occupied for some time the position of the world's premier exporter of oleomargarine. About 70 percent of the oleomargarine is sold in the United Kingdom despite the existence in the latter country of a fairly extensive domestic industry. In 1929 oleomargarine exports represented nearly one fourth of the total value of all meat products and animal fats. It should be borne in mind, however, that although it is classified with meat products much of the Dutch oleomargarine (the same applies to European oleomargarine generally) has vegetable oils as its chief ingredients. Since 1926, when the United Kingdom imposed a ban on fresh meat imports from the continent, the Netherlands has devoted more attention to the development of an export trade in bacon and salt pork. Such exports had by 1929 become the main items in the export trade, reaching a money value total of \$22,000,000, or almost one third the aggregate value of all meat exports. Ninety percent of the bacon and salt pork is sold in the United Kingdom. The Netherlands also exports fresh pork, lard, fresh beef and veal, canned sausage and lard compound.

Three fifths of New Zealand's meat export trade during 1929 on a value basis consisted of frozen lamb. Shipments amounted that year to \$33,000,000, frozen mutton shipments only to \$8,750,000. Virtually all of these meats were supplied to the United Kingdom. Other meat products exported were frozen pork, tallow, sausage casings and frozen beef. Australia offers a direct antithesis to New Zealand in the nature of its export trade in meat products. Beef, mainly frozen meat, constitutes over one third of the

value of meat products entering export trade. About half of this beef is shipped to the United Kingdom; Belgium purchases approximately one sixth of it; Germany follows next in order. Chilled or frozen lamb accounts for a substantial increase in the annual meat export trade, with mutton contributing a smaller share. Practically the entire quantity of lamb and mutton was marketed in the United Kingdom.

Over 50 percent of the meat products exported by the Irish Free State consists of bacon, while fresh pork makes up another 25 percent; the remaining exports are mainly other pork cuts and lard. Almost all Irish bacon is shipped to the United Kingdom; 40 percent of the fresh pork has the same destination, the remainder for the most part being sent to Northern Ireland. Poland while importing American lard and fatbacks is an exporter of pork products. Polish bacon first appeared in volume in the world market in 1929, when nearly 27,000,000 pounds were exported, practically all to the United Kingdom; the next year over double this quantity was marketed in Great Britain. Polish hog raisers are paid subsidies by the government to stimulate the breeding of a suitable type of hog, and as a further encouragement a system of compensatory tariffs on imports was adopted in 1932. Three products—bacon, salt pork and sausage casings—account for the major portion of Canada's export trade in meat products. Bacon valued at more than \$6,500,000 was exported in 1929, going almost exclusively to the United Kingdom.

The world's outstanding importers of meat products, with the value of their trade in terms of United States dollars in 1929 (except when otherwise indicated), were: United Kingdom, \$605,585,000; Germany, \$89,498,000; United States, \$40,557,000; the Netherlands, \$38,613,000; Italy (1928), \$21,820,000; Cuba, \$20,214,000; France, \$19,388,000; Austria, \$15,600,000; Czechoslovakia, \$15,000,000; Belgium (1928), \$14,937,000; Mexico (1928), \$9,695,000. The meat products entering the United Kingdom alone amounted to nearly two thirds of the total value for all eleven countries; also fully 98 percent of the imports remained in Great Britain. Over one third of the value of the British meat imports in 1929 consisted of bacon, two thirds of which came from Denmark and about one tenth from the Netherlands. Chilled beef imports came second, constituting 20 percent of the total value in 1929; 90 percent or more was generally imported from Argentina. Frozen

lamb largely from New Zealand followed next, constituting as a rule about 10 percent of the value of meat imports. Other important products purchased abroad were lard, hams, frozen mutton, canned beef, frozen beef, oleomargarine and edible offal.

The principal meat product imported into Germany in recent years has been lard, which in 1929 constituted one third of all the meat imports; most of this came from the United States. Sausage casings rank second, making up one fourth of the total in 1929, with the United States, Denmark and Argentina sharing the bulk of the trade. Chilled and frozen beef comprised around 15 percent of the total value in 1929. In volume imports in 1929 were only about half what they had been in 1925-27, as a result of tonnage quota limitations.

Since the war the United States has become a large importer of canned meats and sausage casings, these two articles making up in value over half the trade. Canned meats are bought from Argentina and Uruguay; sausage casings for the most part come from Australia, New Zealand and Soviet Russia. Fresh beef supplies from New Zealand and Canada occasionally appear on the market in the United States, especially when prices are high enough to encourage this competition.

The requirements of the Netherlands oleomargarine and other fat industries necessitate heavy importations of both edible and inedible tallow, oleo stock and oil, inedible hog greases and unmelted animal fats. The Italian import trade consists of fresh, chilled and frozen meats of every kind, principally beef, with Argentina the largest individual shipper. Fatbacks, half of which usually come from the United States, and meat extracts from Belgium also figure in the import trade.

Cuba provides the United States with its chief marketing outlet in Latin America. In recent years, however, the cumulative effects of economic distress, a rising livestock population and successive upward revisions of the Cuban tariff have had a direct and unfavorable bearing on the import trade of the country. Lard is the most important meat product imported. A stable volume of around 20,000,000 pounds of bacon has entered Cuba annually over a period of several years; salt pork and jerked beef also figure in the Cuban import trade.

France imports fresh and frozen pork largely from the Netherlands, fresh and frozen mutton from Argentina and lard from the United States

and the Netherlands. Since 1925 France has succeeded in restoring its cattle herds which had been depleted during the war; therefore imports of meats other than mutton and pork have declined markedly. Imports of salted pork, ham and bacon also have decreased radically. Austria imports fresh or frozen meats from neighboring countries and lard and bacon from the United States. Czechoslovakia imports lard, largely from the United States, sausage casings from Germany and fatbacks from the United States. Belgian meat imports consist for the most part of chilled and frozen beef, lard, inedible animal fats and fresh meats such as edible offal. In 1928 three fourths of the Mexican imports were of steam lard from the United States; this lard was refined and packaged for retail distribution after reaching Mexico. For most of its other meat products Mexico was self-sufficing.

In order to encourage and to protect home industries and in some instances to supply revenue many countries have placed increased duties on meat imports in the past decade; since 1929 the trend in this direction has been particularly marked. Germany sought to restrict the amount of frozen beef imports through the imposition of definite quotas in 1927; more recently quotas on hogs and cattle shipments from neighboring countries have been established. In 1932 higher duties were levied on such major meat product commodities as beef, veal, pork, lard and fatbacks. The Netherlands took action along much the same lines; quota requirements are in force with regard to beef and veal imports, while special sanitary certificates are demanded on pork product imports, especially those coming from the United States. In 1932 heavier duties were levied on beef and veal and on inedible and unmelted animal fats. Most of the other countries included in the list of major importers of meat products have enacted measures making mandatory the procurement of licenses or permits to import, based on quota allocations. Upward revision of tariffs also has been general for the countries under discussion.

The three largest American packers, Armour and Company, Swift and Company and Wilson and Company, Inc., maintain in many of the European countries branch sales offices, which serve their respective markets through agents in the large centers of the country. This is the policy pursued in Germany. It is somewhat different, however, in the United Kingdom, where the packers' branches sell through local wholesalers in the more important cities much as the

home branches do in the United States. A few of the smaller American packers follow a similar sales procedure; but for the most part they deal with import commission houses, which act in many instances as exclusive agents for particular districts. Small packers, who are not regular exporters, enlist the aid of export brokers who have correspondents abroad. Some years ago it was a not uncommon practise on the part of the packers to make consignments of meats, lard and the like to agents and branches abroad. Exchange difficulties, falling prices and sometimes the depressing effect on the local market of consignment stocks awaiting sale have caused many shippers to abandon this policy, although it is still pursued in the case of European branches of packing concerns where there is assurance of periodic turnover on a reasonably stable market. Lard, for example, is consigned under such conditions. Outside of Europe, particularly in Latin America, American packers invariably appoint an individual or firm as their sales representative, unless they sell through an export broker. There are a few exceptions; in Havana and Mexico city branches similar to those in Europe are operated by the largest packers.

In the British dominions exporters of meats usually establish wholesale importing houses to look after their interests in Great Britain. A large British packer operating in Argentina, Vestey's United Investment Corporation, controls a chain of meat shops in England, and much of the output of the packing plant is thus under this packer's control until it reaches the consumer. A considerable proportion of dominion meat as well as meat imported from elsewhere for consumption in the London district is sold in Smithfield Market; here the various wholesale houses have stalls where the retail butchers make their purchases. Reference has already been made to the fact that eighteen of the Danish cooperative bacon factories consign their bacon for sale to the Danish Bacon Company, Ltd., in England; the other Danish bacon factories make shipments several times weekly to English wholesalers.

FRANK M. SURFACE
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SOCIAL ASPECTS. It is a trite saying concerning industries generally that they are both buyers and sellers and that their profitable operation depends upon buying cheaply and selling dearly. What is singular about the packing industry as

a buyer of raw materials, labor and equipment and as a seller of meat products is that it must deal in both markets more or less directly with large sections of the public. The facts that in these markets the public is economically unorganized and that the producers of animals on the one hand and the consumers of meat stuffs on the other are chronically discontented predispose both groups toward a suspicious and perverse attitude in their market relations, especially with a well organized big business like the packing industry. Whether this tendency toward perpetual bickering and captious complaint in livestock and meat markets is a manifestation of an inferiority complex or the spontaneous reaction to persistent abuse need not here be determined. What is significant is, first, that the public relations of the packing industry have long been and continue to be turbulent; second, that the direct relations in which the industry stands to both raw material producers and ultimate consumers are a root cause of this unsatisfactory condition; and, finally, that the most dissatisfied elements, the farmers and the consumers, have sought relief from their handicaps in the industrial *bellum omnium contra omnes* by an appeal to political power. These economically impotent but politically aggressive classes, between which the packers mediate in a narrow range, have shifted the arena of their resistance and attack from markets to legislative halls.

Moreover the circumstances that the products of the meat processing industry are daily necessities, that the production of its raw materials cannot be economically organized upon a large scale (husbandry, like agriculture, requiring close observation and judicious care), that the transformation wrought by processing of the major part of the products (i.e. dressed meats) is comparatively slight and the time consumed relatively brief and, finally, in consequence, that the industry has a very high rate of turnover and an annual volume of sales exceeding that of any other manufacturing industry—all these do not diminish but rather accentuate the significance of this peculiar situation of the packing industry. Manifestly there is nothing inherent in these circumstances either to assure the meat packers a position of dominance in the markets in which they deal or to foredoom them to one of subjection; and, with equal cogency it might be argued that these fundamental conditions of its economic environment make the industry exceptionally vulnerable, or, on the other hand, afford a good opportunity for "playing both ends from

the middle." It would appear, however, that the explanation must proceed in terms of other factors which are essentially extraneous to the basic characteristics of the industry. Such factors are: first, the ownership and control of public stockyards by packing house interests; second, the extensive development of by-products and resulting marked joint cost features of the meat packing industry; third, the acquisition and operation of specialized distribution facilities, particularly refrigerator cars and cold storage depots. All have contributed powerfully to the development of the dominance of the packers in livestock and meat markets, the second and third factors especially through fostering and fortifying a large scale, compact, big business organization of the industry; the third has led to an expansion of the dominant position thus attained into related lines of food distribution.

Before the specific influence of each of these factors upon the growth of the power of the packers is taken up in greater detail, it may be well to observe that this analysis has in view primarily the experience of the United States and Argentina. The conditions in Australasia are radically different, chiefly on account of the remoteness from the major markets and the attendant impracticability of developing by-product utilization to a significant extent and because sheep husbandry affords the primary producers a stronger defensive position in marketing, since they may shift their resources to wool growing. As a consequence meat processing and handling in Australasia have always been organized upon a small scale. The intervention of governments through the agencies of the New Zealand Producers' Board and the Australian Meat Council, unlike that of the American and Argentinian governments, represents therefore not so much an effort to curb a formidable and predacious organization of private business interests in the processing branch of the industry but rather an attempt to overcome a competitive handicap from disorganization and inefficiency by measures calculated to promote standardization and a certain unification of policy. The absence of a powerfully entrenched meat packing industry in the countries of continental Europe has another explanation. Basically it may be attributed to the restrictive influence of population density and high land values upon the livestock industry. The maintenance of a heavy flow of raw material, necessary to the economical operation of a large scale packing house, is thus quite out of the question, the more so in that the

network of customs barriers precludes the assembling of supplies from a wide area. Furthermore, although this is doubtless quite as much effect as cause, the policy of providing public abattoirs and of maintaining public markets has in some measure restricted opportunities for the exploitation of producers and has held in check the growth of meat processing establishments.

In North and South America, more particularly in the United States, on the other hand, the essential conditions for the development of the packing industry along big business lines have been present. First, there is an ample supply of livestock available at convenient shipping points some distance, but not too remote, from large consuming centers. Second, additional leverage for effecting the concentration of the packing industry into relatively few units has been obtained from other sources—the stockyards, by-products and distribution facilities.

There are various ways in which the ownership and control of stockyards by packing interests have been made to yield them substantial advantages over and above those arising from their inherently superior bargaining position. Stockyards are organized livestock markets. Of necessity the sellers, or producers, deal through commission merchants. The stock must be sold within a short time of its arrival at the market, although conceivably it might be held for a few days in anticipation of an improved market. Actually, however, the owners of the stockyards were in a position to enforce rules and exact terms making it prohibitory to “hold over” the stock beyond the day of its arrival. In these circumstances no matter how conversant with the rules, well informed upon the current facts regarding demand and supply and assiduous in advancing or protecting the seller’s interest the agent might be, he operated under a severe handicap. As a consequence the principal buyers, representing the packers who had a considerable leeway in contracting for their “requirements” by virtue of the normal possession for a fortnight or so of supplies consisting of meat in process and in course of distribution, were able to force sales of large quantities of stock at prices advantageous to themselves. It was the old case of the Saturday night fish market, in substance. There were of course limits to the extent to which in their own interests the packers might push this strategy. They had to assure themselves in the long run of a sufficient flow of raw material for the profitable operation of their meat business.

One way of providing a lure for the maintenance of supply by stockmen was the occasional bidding up of prices on “thin” markets.

The means by which this fundamental strategic advantage of the packers in their privately owned stockyards was reenforced and consolidated were devious. Commission men received the privilege of operating in the yards at the discretion and exercised it at the pleasure of the packers. The same was true in the case of buyers for alternative purposes, as for export, feeding and kosher slaughtering. New entrants to the packing industry itself were confronted at the very outset with barriers to access to the raw material market by virtue of the economic necessity of close contiguity to the stockyards and the latter’s control of adjacent sites. In addition to these primary tactical advantages of the original packing houses resulting from their ownership of the stockyards, there were innumerable subtle means of organizing the market for their special benefit. Assignments of stock to pens, provision of feeding services, switching and handling “bunches” of stock before and after sale, grading rules, dissemination of statistical information of the market—these and many other features of the daily operation of the stockyards could readily be so manipulated as to confer substantial preferential advantages upon the favored interests.

In view of all this it is not surprising that the scattered livestock growers, who were ultimately the chief victims of this situation in the primary markets for their products, should have raised a protest. The first response, in the form of positive action, to their insistent demands for governmental protection was the filing on May 10, 1902, of a bill in equity against the largest packers, at that time the Big Six, charging a conspiracy to manipulate the livestock and dressed meat markets and to fix prices in violation of the Sherman Act. An injunction was granted in May, 1903, which upon appeal was sustained by the Supreme Court, January 30, 1905 (*Swift & Co. v. U. S.*, 196 U. S. 375). Two months later a group of the same defendants was indicted under the same statute for a similar offense; but after prolonged litigation the individual packers successfully invoked the issue of personal immunity because of information furnished by them to the Bureau of Corporations and the cases were dropped by the government. Meanwhile the results of an official investigation by the Bureau of Corporations, published in 1905, had tended to confirm the charges by the

livestock producers that they were victimized by the packers.

In 1917 the successor of the bureau, the Federal Trade Commission, was ordered by President Wilson to institute an inquiry into the production, ownership, manufacture, storage and distribution of foodstuffs; among others the meat packing industry was studied and at intervals from 1918 to 1920 a six-part report on it was made public. It was a creditable piece of research pursued with vigor, discernment and a commendable indifference to the hue and cry raised by the packers that they were being persecuted by government agents with a partisan bias. The findings of the commission, despite the concealment and even destruction of much evidence by the packers, now become the Big Five, were amply supported. It was demonstrated that the industry had been substantially monopolized and the law plainly violated. Special emphasis was laid moreover upon the unlawful preferences and privileges enjoyed by the packers: first, in livestock markets through their control of stockyards; and, second, in meat distribution through their control of private refrigerator car lines. It is to be noted too that the significance of surreptitious agreements, by which the interests of the dominant group were in these and other essential matters unified, was not overlooked.

The Federal Trade Commission report aroused considerable agitation not only in Congress but among the public generally and in particular among various allied and antagonistic trade groups, notably the livestock producers and the wholesale grocers. Action by the Department of Justice was preceded, however, by conferences with the Big Five packers, resulting in an agreement whereby, when a petition in equity was filed on February 27, 1920, a consent decree was entered on the same day. The terms of this uncontested decree were singularly injudicious. In some respects it imposed indefensible burdens upon the defendant packers, as in the requirement that they should abandon and forsake all interest in the so-called "unrelated lines" of food processing and distribution, such as the canned fruit and vegetable trade. In other respects it left the power and practises of the defendants unmolested, notably in regard to the ownership and operation of the private refrigerator car lines. But the most salutary feature of the decree was the enforcement of a divorce of the packers from their stockyard interests.

The consent decree of 1920 was followed a

year later by the enactment of the Packers and Stockyards Act. The measure was undoubtedly designed to restore and maintain competitive conditions in the packing industry and, on the other hand, to terminate even the prospect of potential competition among stockyards by their recognition as public utilities. This sharp distinction in the public policy established in the two fields is partially recognized by the division of the act into four major sections, one of which applies exclusively to the packers and another exclusively to stockyards and dealers. But the effective enforcement of two types of regulation so divergent in aims and methods cannot reasonably be expected from a single agency such as was provided for in this statute under the aegis and ultimate responsibility of the secretary of agriculture. Moreover there are certain provisions made applicable to both classes of business, such as that for enforcing standardized accounting procedure and authorizing rules for periodic reporting, which while clearly valid for the public utility class, that is, the stockyards, are of dubious legality as applied to a business like meat packing traditionally regarded as "private" and otherwise so treated in this very measure. From the economic as distinct from the legal standpoint, however, this may well be regarded favorably as an experimental "entering wedge" for the more effective regulation of large scale industry.

The subsequent history of the consent decree of 1920 and of the Packers and Stockyards Act, so far as these are concerned with the relationship between the packers and their primary, or raw material, markets, may be briefly summarized. No challenge has been made of the legality or of the expediency of the removal of the stockyards from packers' control by the consent decree, the bitter and almost continuous litigation over the enforcement of its terms having centered entirely around the provisions estopping the packers from engaging in the so-called unrelated lines of food distribution. The administrative regulation of the stockyards and the dealers operating in them, not only in reference to licensing, bonding and accounting procedure but also with respect to stockyard rates and the fees of commission men, has been upheld judicially [*Stafford v. Wallace*, 258 U. S. 495 (1922); *Tagg Bros. v. U. S.*, 280 U. S. 420 (1930); *Denver Union Stock Yard Co. v. U. S.*, 57 Fed. (2d) 735 (1932)]. So far as the dominance of the packers rests upon other features of the organization and activities of the trade,

however, the 1921 legislation and indeed the 1920 decree appear to have had slight effect upon their position. The transfer of the responsibility for the enforcement of the antitrust and unfair competition laws, in the case of this industry, from the Department of Justice to the Department of Agriculture was of questionable expediency. In practise, if the administrative indifference to the Armour-Morris merger of 1923, which reduced the Big Five to the Big Four, may fairly be regarded as an index of policy, the packers appear actually to have been put under a freer rather than a tighter rein in the conduct of the business for their own ends.

The by-product feature of the packing industry has developed, especially in the United States, to prodigious dimensions, as has been pointed out above. The significance of this wide range of the packers' interests is manifold. In the first place, the great diversity tends to assure them a stability of business seldom attainable in other fields. Second, it permits a diversion of materials in process from one use to another in accordance with the changing relationships of the market demand for different end products. In the third place, and perhaps this is the most significant, it leaves a wide latitude of choice to the packers in the allocation of costs and the pricing of their products. For not only are overhead costs, as elsewhere, to be treated as joint costs but also the material costs and even a considerable part of the labor costs must be so ranked. In these circumstances the price policy with respect to the major product, dressed meats, may easily be such as to give the appearance of a small, even less than competitively "normal," margin of profit, whereas over the whole field of operations the returns may be inordinately high. On the other hand, it must be evident that in the absence of some understanding upon price policies or otherwise among the packers the maintenance of a "normal" level of profit would be exceedingly precarious. For, if each packer allocated his costs and framed his price structure independently there would be grave danger that each would distribute the joint costs or would "load" the prices of the various end products in different proportions. The consequence would be that each product of every packer would have to meet the market price of competitive articles which rival packers had "loaded" with the minimum share of the joint costs. The outcome might well be that the products in the aggregate would not yield a sales value adequate to cover the aggregate costs. It

follows that the establishment of some common rule in respect to pricing or to territory or to output volume was practically inescapable under a system of free business enterprise in the packing industry.

Experience has indicated clearly that the imposition of a common rule of some sort has been adopted by the packers as a normal procedure. As early as the 1890's by their own admission they were operating a pool called after the name of the secretary the Veeder pool. Under this arrangement the respective shares of the total shipments of dressed meat into specified market territories of the several members were agreed upon in weekly meetings; and the prices to be charged by each were fixed by an arbitrary cost margin computation based upon the purchase price of the livestock. After the abandonment of these pools in 1902 because of public agitation and the imminence of the Sherman Act prosecution previously mentioned, a scheme was devised for effecting a complete proprietary consolidation of the interests of the entire group of big packers. The National Packing Company was launched pursuant to this scheme in 1902, and six of the minor concerns involved were actually acquired; but before the plan could be consummated clouds began to appear on the horizon of the investment market, banker credit cooperation was withdrawn and the ambitious merger program had to be postponed. The change in the temper of public opinion with the advance of the Roosevelt administration and the growth of the progressive movement made it inadvisable to return to this scheme later. The National Packing Company was eventually dissolved in 1912, although while it lasted it served as an effective vehicle for harmonizing the buying and selling policies of the principal interests in the packing industry. Its properties were divided up among the Swift, Armour and Morris interests, which together had owned and operated the concern. Meanwhile a new and simpler common rule had been devised. This was the establishment of a fixed percentage of livestock purchases for each of the several big packers. There was adopted what was known as the "1910 arbitrary," or an agreed division of the total livestock purchases of the group throughout the United States.

The third feature of the aggressive policy through which the expansion and consolidation of the interests of the big companies have been accomplished is the acquisition and control of distribution facilities. The importance of re-

frigeration in the development of large scale organization in the packing industry has already been pointed out. While there were no patents restricting the construction or operation of refrigerator cars by any packer who might choose to make use of them, the facts that only large fleets of cars serving a wide and diversified market could be economically operated and that special preferences and concessions were early and persistently granted by the railroads to the largest packers tended to deprive late comers or minor operators in the industry of equal opportunity of access to markets. Further, as the Federal Trade Commission pointed out: "The Big Five packers have an added advantage which indicates the unity and cooperation under which they operate: . . . their cars are pooled in that they lend them back and forth . . . when one or another is in particular need of equipment."

Once possessed of a substantial monopoly, as the Big Five were by the time of the World War, of the indispensable means of shipping dressed meats to any point in the country under any kind of weather conditions, the packers could extend their domain by utilizing these same facilities in the conquest of new fields of distribution. With all of the superiority in service through expedition of movement, convenience of scheduling and assured maintenance of grade standards which could thus be capitalized, there seemed to be a good prospect of their speedy displacement of a large section of the wholesale grocery, dairy products, vegetable and fruit trades. Beginning about 1915 rapid progress was made in this campaign, and the question was raised whether the big packers were destined to become centralized wholesale food purveyors to the entire United States. A similar tendency was noted in Great Britain, although in that country the emphasis was more upon the vertical than upon the horizontal direction of expansion. Measures were taken in both countries to stem what was regarded from the public standpoint as the untoward trend of events.

By the terms of the consent decree of February, 1920, the defendant packers undertook to relinquish and forego all interest in the wholesale distribution of a long list of specified commodities embraced within the lines of trade referred to above. It is at least dubious whether this restrictive measure was expedient, considering the nature of their alleged offense, since it left them in undisputed and uncurtailed enjoyment of the very privileges and preferences upon which their hegemony in the meat trade had

been built up. And it is more than dubious whether this drastic measure was sound, since it enforced the utilization of the concededly superior distribution facilities of the packers at a lower level of efficiency than experience had proved them capable of attaining. Nevertheless, the packers were ill prepared indeed to go into equity to seek a modification of this restrictive decree. This circumstance beyond a doubt helps to explain why, despite the most determined and persistent efforts, which have succeeded in carrying the issue twice before the Supreme Court of the United States, the limitations of the consent decree of 1920 are at present in full effect [*Swift & Co. v. U. S.*, 276 U. S. 311 (1928), and *U. S. v. Swift & Co.*, 286 U. S. 106 (1932)]. It is significant to note, however, that the packers are still operating their private car lines. It is only the commitments, not the omissions, of this unfortunate decree which have been challenged.

The discussion up to this point has been concerned with the mode of organization of the meat packing industry and with the attempts, by legal or administrative regulation, to mold the structure, policy and practises of the industry into closer conformity with what have been conceived from time to time to be paramount public interests. With regard to the social aspects of the industry the most important questions in this connection are the standards of wholesomeness maintained for the products of the industry and the standards of living and of working conditions maintained for the employees. Because of the noisome odors which inevitably attend the practical business of butchering, stockyards and slaughterhouses have long been confined by law to designated areas usually situated at some distance from the center and from the better residential sections of urban communities. For economic reasons the districts commonly designated or selected for this specialized use have generally had a terrain making them ill adapted for any alternative use, and unfortunately in many regions this has necessarily meant a low and swampy place. So long as slaughtering was only an occasional occupation of local butchers this utilization of "waste land" was not especially bad policy, but when slaughtering became a continuous, large scale, major industry, the topographical characteristics of these sites became nothing less than a calamity. Above all, poor drainage is the worst conceivable nemesis to the production of wholesome meat and animal products. Slaughtering, dressing and curing quarters

cannot be kept clean without a liberal use of water, and where there is the slightest tendency to the accumulation in stagnant pools of water bearing refuse matter there is certain to be great danger of contamination. Under the profit motive, however, and the exigencies of a fixed-right-of-way transportation system, such as the railways provided, the escape from these waste land Packingtowns was impossible. Even more significant is the fact that the cost of introducing equipment, facilities and measures to offset their naturally bad features was regarded as prohibitive by profit motivated packers relentlessly driving toward the realization of vast ambitions over the tenacious resistance of the old, small town, local butcher shops.

It required the vigorous onslaught of a reforming crusade to break down the indifferences of habit and inertia. In the United States Upton Sinclair led this movement, and his novel *The Jungle* was the alarm clock which awakened both the packers and the public to the arrival of a new day. *The Jungle* was first published in 1906, and before the end of that year two official investigations by agencies of the federal government had been made and Congress had passed new legislation making governmental inspection for the first time compulsory. Moreover the required inspection was extended from the antemortem examination of the animal to a much more rigorous, and incidentally far more essential, inspection of the methods and processes of the preparation of the meat stuffs. So volcanic an upheaval could not fail to attract attention abroad, particularly in Great Britain, which depended so heavily upon foreign meats. The result was that Argentina, also in 1906, adopted measures providing for the regulation of the conditions under which livestock was transported and slaughtered as well as for the inspection of the animals. In succeeding years the British government was able to bring pressure to bear on Argentinian officials in order to effect a tightening of the inspection machinery.

The development of standards for the amelioration of the living and working conditions of workers employed in the meat packing industry has not been attended with the same degree of success. The unsanitary environment in which the laborers must live in the vicinity of the stockyards and packing houses has long been a matter of protest both by reformers and by employees themselves. Nevertheless, despite the obvious and direct connection between the health and hygiene of meat workers and the

cleanness and wholesomeness of meat products, little or nothing has been accomplished in the way of special public regulation of the responsibilities of packers to their employees. The latter have been left, like workers in many other fields, to shift for themselves. They have done so with indifferent success, pursuing methods familiar elsewhere. Sporadic strikes have given evidence of their resistance but these have yielded only unimportant gains, especially in job security. Not even the notable evidences of solidarity in the bitter strikes of 1886, 1894, 1904 and 1921 brought significant results.

The efforts to organize the workers have in the main been sponsored by the Amalgamated Meat Cutters and Butcher Workmen of North America. Whether in spite of or because of its industrial as opposed to craft structure, the organization has made little headway, save temporarily in periods of strike agitation. The large employers have steadily refused to recognize or deal with the union directly. But doubtless the most formidable obstacle to effective unionism in the industry has been the dissipation of all around skill as a significant factor in employment, less because of advances in the use of machinery than because of the minute subdivision of tasks, which makes the acquisition of the special skill required for each job a relatively simple matter. There has consequently taken place an infiltration of large numbers of inexperienced workers, made up at various times predominantly of particular nationalities or races, who usually have not found a ready compatibility in temperament and outlook with those previously employed. These antagonisms make general employee cooperation difficult if not impossible. The high rate of labor turnover resulting from the employers' easy access to such a wide and diversified labor market has also stood in the way of the development of a strong and militant labor movement.

It is manifest that the meat packing industry has not solved the critical problem with which it is confronted by virtue of the peculiar position it occupies. After the upheavals of a quarter century ago, which brought it the unenviable distinction of being perhaps of all industries that with the greatest ill repute, public criticism has subsided. This may be traceable in part to a doubtfully justified sense of security derived from the establishment of a rigorous system of regulation for the safeguarding of the wholesomeness of meats when they leave the precincts of inspection; in part it may be due to the

belated and imitative development of welfare capitalism within the industry as a means of allaying labor discontent. No doubt too the establishment in 1919 of the Institute of American Meat Packers has had a salutary effect on the industry's public relations. Thus the institute, in affiliation with the University of Chicago, has encouraged scientific research, sponsored the study of the economic problems of the industry and has trained experts for managerial positions. But it is not inconceivable that the absence of public criticism in recent years has been the consequence also of a prevalent although possibly only temporary attitude of apathy and cynicism concerning all that pertains to the responsible performance of industrial functions.

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See: LIVESTOCK INDUSTRY; FOOD INDUSTRIES; DAIRY INDUSTRY; REFRIGERATION; FOOD SUPPLY; NUTRITION; FOOD AND DRUG REGULATION; STOCK BREEDING; AGRICULTURAL MARKETING; AGRICULTURE; CATTLE LOANS; COMMODITY EXCHANGES; TRUSTS.

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MECHANIC. The mechanic as contrasted with other skilled workers is a worker who is equipped to deal with various kinds of mechanized apparatus and to use relatively complicated tools and who possesses considerable technical knowledge. In general usage among workers themselves the term is a synonym for a skilled worker of journeyman rank and may include workers who, strictly speaking, are not mechanics. Skill applied to forms of labor distinguished from mere

utilization of muscle forms the essential element of the mechanic's qualifications; but the mechanic is as sharply differentiated from craftsmen and artisans as are all three from ordinary unskilled workers.

Although the word mechanic appeared in the English language at a surprisingly early date (there is a reference as early as 1390 by the poet John Gower) it came into general use only after machines were relatively common and into permanent use only after the industrial revolution. As early as 1681 a master mechanic was defined as one who repairs and manages machines. Both as words and as forms of labor craftsman and artisan appeared before mechanic. The term craftsman does not have the same meaning as artisan, which seems to have appeared in the English language considerably after the former. Some idea of the changes in technology and forms of labor may be gathered from the progression in terminology: serf, craftsman, artisan, mechanic and junior technician. Technician did not appear as a term until 1833, and junior technician not until recently. The term technician is not yet widely accepted as a description of the skilled machine operator in the new machine age, but it is likely to supersede mechanic as the older machine age gives way to the newer age of automatic machinery.

Pre-industrial society, strictly speaking, did not know the mechanic at all, except in his primitive predecessor, the artisan. Artisans were workers who used their skill on machines or other mechanical appliances, as contrasted with craftsmen who used their skill directly on the material out of which products were made. There were border line cases, but the distinction is fundamental. Craftsmen included wood carvers, weavers, stonemasons and makers of violins, pottery and furniture. Many of the earlier machines used craftsmen rather than artisans or mechanics; thus the potter's wheel involved a real craft. The skill of the ancient and mediaeval craftsmen bordered on the arts, which was manifest in the high quality of their products. While the artistic element predominated in the skill of the craftsman, mechanical aptitude and precision characterized that of the artisan. One group of artisans worked with machines; these included pumps, catapults, well sweeps, simple cranes, wine presses, windmills, organs, water clocks and grinding apparatus. They were elementary and crude, but their construction, much of their operation and their repair required considerable skill and technical knowledge, which

increased as machines became more complicated. The skill of another group of artisans bordered on craftsmanship, although the major element was mechanical aptitude. This group included blacksmiths, coopers, millwrights, carpenters, armor makers and later typesetters. These artisans were all predecessors of the modern mechanic.

The artisan of the earlier technology and the mechanic of the machine age do not differ essentially in the degree of their skill; the difference involves rather an extension of the worker's power and an increase in the necessary technical knowledge. There is measurable continuity in the skill of the artisan and the mechanic; the millwright, for example, evolved into the machinist or mechanical engineer. The same literacy is involved in typesetting by hand as by machine, yet the old printer was as pure an example of the craftsman artisan as the linotype operator is of the mechanic. At first the evolution of industry away from handicraft meant giving the artisan or mechanic more tools of greater complexity and power. It was during the transition from handicraft to machine production in the earlier stages of the industrial revolution that the mechanic secured his most favorable position in industry. Factories did not increase in size, and there was an intermingling of the two types, craftsman and mechanic, with the mechanic supplanting the craftsman as machines came more generally into use. The skill and technical knowledge of the mechanic were not diffused, and he therefore acquired a position of peculiar importance and independence, comparable to that of the craftsman of a former age.

The peculiar importance and independence of the mechanic passed with the decline of small scale industry. Productive units increased in size through the massing of various types of machines, which moreover absorbed more and more of the worker's skill; the workers consequently became relatively unskilled and passive operators of the machines, while the mechanics were relegated to maintenance and repair, "industrialized" and deprived of the independence which characterized their employment in small shops. Nevertheless, many of these small shop mechanics persisted and new types were produced by the growth of non-factory industry, among them locomotive engineers and electricians. At the same time the development of more complicated machinery required operation by the "key" man, a new and higher type of mechanic, the junior technician. Labor formerly

unskilled became highly technical; thus the occupation of stoker—traditionally the lowest—gave way to that of the white coated junior technician who operates the boilers by tending a gauge. Other automatic machinery required no skill on the part of the workers but only standardized application—the skill employed in hand rolling cigarettes, for example, has given way to completely mechanical attendance upon an infinitely complex automatic machine. All types of automatic machinery, however, demand the services either of the mechanic or of the junior technician.

It may be asked whether modern industry with its mechanized and semi-automatic character has eliminated the mechanic or whether it has extended the sphere of his competence. It is probable that while it makes heavier demands upon his knowledge and skill, there is a tendency for the number of mechanics relatively to decrease. Their position has been greatly transformed not by change in technology but by change in ownership of the implements with which they work. Ownership of tools once went with the work performed. In the early stages of the machine age investment in tools on the part of the capitalist was trifling compared with investment in labor. At present in the more advanced stages of industry with the creation of colossal units investment on the part of ownership has come to outbalance labor costs, and the economic value of the mechanic has been correspondingly reduced. This demotion on the economic level has resulted in a different rating of skills, while in fact skill has probably not been reduced. There has been moreover a sharp transference of skill from the workers collectively considered to the efficiency engineer in charge of the plant as a whole. In short, the mechanic does not have a vested interest even in his skill but must follow the blue prints provided by the industrial engineer. Nevertheless, even blue print reading is a skill in itself. Henry Ford is credited with the statement that workmen on the assembling line in automobile plants, where jobs are highly specialized and divided and redivided to simple operations, "have more skill than old-fashioned mechanics ever had." He is supported by H. Dubreuil in *Le travail américain vu par un ouvrier français* (Paris 1929; tr. as *Robots or Men?*, New York 1930). In some plants, where production has been made almost automatic, company schools have been founded for the training of workmen.

Questions concerning the degradation or ex-

altation of skill involve chiefly the mechanic in the larger industrial factory units. There has been no degradation of the locomotive engineer's skill or of that of machinists in maintenance and repair shops. The electrician's four years of apprentice training are now supplemented with postgraduate courses designed to keep him abreast of the ever changing and advancing character of electrical science. The advent of the vacuum tube and the photo-electric cell has opened up an entirely new realm which he must enter and master; the trade becomes more rather than less complicated as electrical technology goes forward.

Consideration of the mechanic in factories must take into account a distinction between industries employing scientific management principles and those utilizing mass production methods. They may be mutually exclusive. Confusion of these types accounts for the conflict of views upon the question of disappearance or persistence of skill. Scientific management is predicated upon skill, although in the early developments of Taylorism there was a tendency to underestimate the value of creative cooperation on the part of the workman. There is a modern school of engineers who hold that scientific management can realize its full possibilities only when the mind of the worker grasps the totality of the operation in accordance with the mind of the efficiency engineer and performs that operation in full accord with the general plan. But this does not involve skill in the older meaning of the term, nor is scientific management generally applicable to all industries. The development of technology tends to eliminate the unskilled; they do not, however, become skilled workers but only semiskilled, since the new skill is highly limited and standardized. As most of the factory workers become semiskilled many of the functions formerly performed by the mechanic are rendered superfluous; but while the latter is displaced in the direct operation of machines, he acquires new functions in other parts of the productive process. Even mass production industries require mechanics or skilled key men at certain stages of their operation; moreover as machines become more numerous and complicated, more machinists or mechanics are necessary to maintain and repair the machines. And where the productive process is most automatic, as in electric power plants, for example, most of the workers are skilled mechanics or junior technicians. Nevertheless, for industry as a whole the number of mechanics seems to be diminishing

relatively along with a diminution in the number of other types of skilled workers.

For the mechanic the most disconcerting feature of the changing frontiers of industry is the dwindling of jobs. It is argued that technological unemployment cannot become permanent, as the causative lag between the elimination of men from one craft and their reabsorption in another will finally be destroyed. Yet in the United States in the years 1923 to 1929 there was a permanent group of unemployed workers fluctuating around 1,500,000; this unemployment was caused by the introduction of labor saving devices and the reorganization of industry on a more efficient basis. The situation moreover threatens to become worse. Development appears to be moving toward rather than away from automatization of industry. It is the shrinkage of jobs in every industry, farm as well as urban, which complicates the problem of technological unemployment. Nor have the building trades escaped the impact of technological change. Carpenters whose predecessors were craftsmen in the field of woodworking and cabinetmaking now find themselves saw and hammer men, required merely to assemble factory products which have been shipped to the scene of the construction job; while the painter debates whether the enforced use of a four-inch brush will allow him to compete with paint spraying guns. The plumber mechanic finds that improvements in heating systems cut the number of jobs in half; the electrical mechanic discovers that, because of the inclusion of raceways in the walls during the erection of the building and of the changed character of conduit and wire, about one third the number of men needed twenty years ago can now wire a building.

The advancing process of mechanization not only of industry but of the home and office and of many aspects of living has given increasing importance to maintenance and repair mechanics. The modern theater uses more than two hundred motors, which demand a crew of mechanics for their supervision and repair. A multitude of service stations and garages throughout the country and the increasing use of mechanical appliances have given the mechanic new fields of operation. He operates his own small back street repair shop or works as a service man for great corporations which are built on the vertical plan and undertake not only to supply consumers with machines but to give service on a six-month or three to four-year basis. The mechanical refrigerator and the radio are outstanding exam-

ples of such service, while oil burners are now being sold on a five-year service basis. It is likely that the mechanic surrendered another traditional prerogative when he attached himself to the corporation service group. His opportunity for group action, which took the place of his vested interest in skill or in tools, diminished. Electricians who in the electrical construction industry were making in years of active business as much as \$3000 per year were paid perhaps half this sum as maintenance men for corporation service units. In some cities the repair business takes on standardized, chain store aspects. Here the number of mechanics has definitely increased in recent years, yet the number of available jobs has begun to diminish.

In industries where mechanics predominate increased wages are granted as compensation for a high degree of skill. Employers are not unwilling to pay for workmanship of high order. A strong point of agreement between employers and union men has been upon this question of technical efficiency. The employers want crews that are swift, skilled and efficient. The union wants this kind of mechanic, recognizes that his skill is a commodity with a definite market value and seeks to attract it to the organization, while the employers seek to purchase it in the open market. More than one contractor in the building industry has gone into bankruptcy because he has employed incompetent labor. Even when he has joined with his fellows in forming and maintaining a union, the mechanic remains an individualist where his craft is concerned. He retains all the pride and instinct of workmanship of the older artisans and craftsmen; these characteristics are, however, perverted into an occupational snobbery, which exists not only among the mechanics with regard to the less skilled but also among various classes of mechanics. Pride in craft may be nevertheless a hazard to the economic advancement of the mechanic. It accounts for the small percentage of wastage and spoilage in American industries and the swiftness of technological accomplishment. If American industry rests upon American inventive genius, this in turn depends upon the mechanical skill which is represented by the masses of American workmen.

In the building trades mechanics have raised rather than lowered standards of workmanship during recent years. Unions in association with employers and public school boards have set up training schools which are merely

extensions of the union apprentice system. The building trades cannot be mastered academically but only through practise. The curriculum for electrical workers in a typical school consists of a four-year course including seventy-four separate projects divided as follows: nineteen in simple circuit and house wiring; sixteen in apartment house and commercial wiring; twenty-one in direct current motors, controls and power wiring; eighteen in alternating current motors, controls and power wiring. The men study these projects while pursuing their trade. Cooperation of the unions with school boards has probably acted as an automatic check upon an influx of workmen into these trades, but many "hairpin artists" have been recruited from unsuccessful mechanics and engineers in other fields and probably from boys with uncertificated mail order educations.

Mechanics were the most active element in the American trade union movement of the period from 1825 to 1860 and are still influential in the present organized trades. Although highly individualistic (a trait which in political manifestations led to acceptance of the program of the agrarian radicals) they early expressed the cooperative capacity to organize. Later other skilled workers began to dominate the labor movement, although some of the most powerful unions are still composed of mechanics; for example, those of the printers, electricians and locomotive engineers. In general organization among the mechanics followed the general pattern of American unionism—it flourished in the sheltered trades and was almost non-existent in the massed basic industries. The mechanics' unions had all the characteristics of other craft unions. In recent years unionism among the mechanics has been virtually stationary and in some cases (as among the machinists) has perceptibly declined.

The craft ideal as well as the economic motive has caused unionism to persist among mechanics. The new technology apparently favors craft unionism as much as it does industrial unionism. When an industry becomes semi-automatic and stabilized, the jobs which remain are comparatively permanent. The opposition to unionism on the part of powerful business units rather than the psychology of the mechanic must be accepted as the primary cause of the retardation of union organization. Industrial unionism like craft unionism at present will have to take into consideration the differentiation in skills. Industrial unionism requires a departmentalized organization and will probably mean a gain in flexibility

on the industrial field in negotiations with employers. Yet there are no natural lines upon which workers may be grouped, and divisions are more or less arbitrary. Just as factory units may be too large, so organizations may become unwieldy through becoming crowded with workers of many types. Unionism in Soviet Russia has experienced this difficulty, and efforts have been instituted to decentralize some of the larger labor organizations. An organization like that of the electrical workers, which cuts through all industries, might experience difficulty in performing its functions if it were grouped with other industries, even those closely related to it. Electrical workers, for example, may be grouped with approximately twenty other building trades workers or they may themselves form an industrial union, drawing their membership from the telephone, power generation, radio, electrical manufacturing and electrical construction industries. About 700,000 workers would compose such a unit. The constitution of the present electrical workers' organization does in fact provide for such an industrial union. The miners' organization is an industrial union. In some cases it may be necessary to combine certain aspects of the craft union with industrial unionism. Undoubtedly the mechanics will never again play the dominant role in American unionism that they played in the earlier stages of the movement, since unionism must increasingly depend upon the mass of semiskilled workers. Unionism among mechanics is bound up with the future of unionism in general.

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See: HANDICRAFT; INDUSTRIAL ARTS; INDUSTRIAL EDUCATION; APPRENTICESHIP; INDUSTRIALISM; MACHINES AND TOOLS; TECHNOLOGY; TRADE UNIONS.

MECHANICS' LIEN. See LIEN.

MECHANISM AND VITALISM. These terms indicate two opposed points of view in the interpretation of the phenomena of life, between which biological thought has oscillated throughout its history. In its most general form the difference between the two schools may be expressed as follows. The mechanically inclined biologist lays stress on the fact that whatever else living things may be they are certainly subject to physicochemical laws, and that the history of biology and especially of physiology shows that it was only when the methods of physics and chemistry were adopted that rapid progress began to be made. He infers that in all probability

future progress depends upon an extension and further development of these same methods. Sometimes he may go even further and claim not only that the general trend of biology is toward physicochemical explanation but that one can already say that there is nothing in the phenomena of life which cannot or will not ultimately be reduced to physicochemical processes. The vitalist, on the other hand, is impressed with the fundamental difference between the animate and the inanimate. He urges that so far the processes occurring in living things have not actually been explained completely in terms of processes occurring in inanimate nature, and that the mechanists are not only drawing a heavy bill on the possible progress of tomorrow but are unconsciously influenced by metaphysical or epistemological assumptions regarding what "must" be the ultimate nature of explanations. While appreciating the contributions made to biology by the use of the methods of chemistry and physics the vitalist wishes nevertheless to emphasize the autonomy of biology, the independence, originality and irreducibility of the phenomena of life.

In the history of the controversy between vitalists and mechanists these broadly contrasted views have naturally been expressed in a great variety of forms, influenced to some extent by changes in technique and methodology but in much greater measure by changes in general philosophical outlook. Only a brief survey can be attempted here.

The most influential form of the vitalist doctrine in antiquity is Aristotle's theory of entelechy. This is connected with the distinction drawn by him between matter and form, potentiality and actuality. In the case of every concrete thing its matter, or bare potentiality, may be distinguished from its form, or essence, which is needed to make it actual. In the case of living things the soul, or vital function, is the entelechy which makes the matter, that is, the inorganic substances constituting the body, into an organism, or living unity. Compare the often quoted passage: "Soul is the primary actuality of a natural body endowed with the capacity of life. It is therefore unnecessary to ask whether body and soul are one, as one would not ask whether the wax and the figure impressed on it are one, or in general, whether the matter of a particular thing and the thing composed of it are one" (*De anima*, bk. ii, ch. i).

The mechanistic point of view was expressed by the atomist school of philosophers, who

sought to explain all vital and even human activities in terms of processes of external nature and without appeal to purpose or to immaterial agency. In the stoic school, on the other hand, vital forces were regarded as material principles, but their method of action was distinctly teleological.

In the modern period the issue came to be raised in a far clearer form as a result of the triumphant growth of the mechanical conception of nature in the seventeenth century. Descartes was the first among the moderns clearly to enunciate the view that vital phenomena are in ultimate analysis resolvable into matter and motion and therefore require only physical principles for their explanation. Early in the eighteenth century Stahl, the author of the phlogiston hypothesis in chemistry, gave a fresh statement of vitalism which exercised great influence. He stressed the contrast between mechanism and organism and maintained that in the living organism the soul was the essential part for the sake of which the body exists and by which it is controlled. "Vital activities," he wrote, "cannot, as some recent crude speculations suppose, have any real likeness to such movements, as, in ordinary way, depend on the material condition of a body and take place without any direct use or end or aim."

The subsequent history of physiology, however, was in the direction of the mechanistic point of view, strengthened especially by the growth of chemistry; although it is important to note that many of the great men who contributed to the extension of our knowledge of biological phenomena did not in theory favor either mechanism or materialism.

Until the end of the nineteenth century physicochemical conceptions dominated; they reached their culmination in the writings of Huxley and Max Verworn. Writing in 1875 Huxley says: "A mass of living protoplasm is simply a molecular machine of great complexity, the total results of the working of which, or its vital phenomena, depend on the one hand, upon its construction, and on the other, upon the energy supplied to it; and to speak of 'vitality' as anything but the name of a series of operations, is as if one should talk of the horology of a clock" ("Biology" in *Encyclopaedia Britannica*, vol. iii, 9th ed. 1875, p. 681).

In 1910 Verworn writes: "The explanatory principles of vital phenomena must therefore be identical with those of inorganic nature—that is, with the principles of mechanics" ("Physiology"

in *Encyclopaedia Britannica*, vol. xxi, 11th ed. 1911, p. 554).

The claims of the mechanical point of view did not, however, remain unchallenged in the nineteenth century, and some of the most powerful criticism came from those who were foremost in their attack upon the cruder forms of vitalism. Among these critics must be mentioned Lotze and Claude Bernard. Lotze pointed out that in the scientific treatment of vital phenomena the mechanical method of treatment was absolutely necessary, yet this kind of explanation could not be the last word upon the subject, for the notion of end is indispensable. He urged further that the notion of mechanism in general, in the sense of systems in which the total effect is a resultant of forces in themselves mutually indifferent and whose effects are singly or severally calculable—although a necessary abstraction of science—does not at all correspond to what happened in reality; that in fact the combination of several elements could be followed by effects which were not deducible from the several effects produced by the reactions between every pair of them (*Metaphysics*, bk. iii, ch. viii).

Claude Bernard (1813–78) very emphatically dissociated himself at once from the vitalists and from the materialists. The notion of a vital force, he urged, was barren, since it could accomplish nothing except through the agency of the general forces of nature. On the other hand, physicochemical conditions could not account for the order and harmony exhibited in living things. He speaks of an *idée directrice*, or a *force évolutive*, inherent in every living thing. These concepts are not helpful in science, but metaphysically they are of the greatest importance (*La science expérimentale*, 6th ed. Paris 1918). Bernard's final position is not free from ambiguity, but on the whole Driesch is correct in regarding him as a true vitalist.

The Darwinian theory of the differentiation of species by natural selection is commonly regarded as having been very influential in the increasing dominance of the mechanistic conception of life. This is probably true historically. Logically, however, there is no necessary relation between the Darwinian theory and the physicochemical interpretation of living structure and function, since the theory assumes the existence both of variations and of hereditary transmission, and it is an open question whether these can be interpreted in exclusively physical terms.

Of what is sometimes called neovitalism

Driesch is perhaps the most noteworthy exponent. His argument is twofold. First, in what he calls deductive vitalism he seeks to establish the possibility of non-mechanical agency, whereby a unity or totality is produced which is not spatially or mechanically predetermined. The bearer of such "individualizing" causality, which acts according to him by suspending possible change or relaxing suspension, he designates as entelechy; "an agent *sui generis*, non-material and non-spatial, but acting 'into' space, so to speak." Secondly, he gives empirical proof of vitalism designed to show not only the inadequacy of the mechanical conception of life but also more positively the existence of certain indicia, or characteristics, pointing to the autonomy of life (restitution and regulation, active adaptation and the phenomena of instinct and its regulation).

This sort of vitalism is rejected by non-mechanists such as J. S. Haldane as too indefinite to be of value as a working category. On his side Haldane is concerned to stress the wholeness, self-determination and self-maintenance of living things, their inherently co-ordinated structure and activity in relation to their environment. "What part is to part, or environment to organism, can only be expressed in terms of the organism's life as a whole. This gives definition to the parts and environment alike, along with their activities, and so makes it possible to treat them scientifically" (*The Philosophical Basis of Biology*, p. 29).

Biology in his view must employ its own categories, for, on the one hand, there is in living wholes an element of immanent order which physical conceptions fail to express, while, on the other, this order cannot profitably be interpreted in terms of conscious purpose, the reactions observed being "blind." With this may be contrasted the views of the psychobiologists, like E. S. Russell, who regard life and mind as essentially identical, on the ground that both vital and mental phenomena exhibit the elementary psychic moments of tendency, mnemonic action and regulability. It must be added that metaphysically Haldane is an idealist, and he regards the categories of physics, biology and psychology as abstractions necessary and irreducible on the scientific level but only imperfect renderings in different forms of one and the same spiritual reality.

In recent philosophic thought the whole controversy has been reexamined in the light of more general theories of reality. The situation

may be summed up thus: (a) The school of emergent evolution repudiates the appeal to any vital force, entelechy or *élan* supposed to control what is otherwise merely mechanical. The organism is not made up of mechanism plus entelechy but is a new form of integration or order of relatedness, emergent in the sense that it is not deducible as a resultant from the data afforded by the elements of a lower level of relatedness, such as atoms, molecules, colloidal units. Vital phenomena moreover form only one stage on the ascending hierarchy of novel forms of relatedness which constitutes the evolutionary process. (b) In the holistic philosophy the emphasis is not so much on novelty as on the tendency toward the formation of wholes. It differs further from the emergent theory (as formulated by Lloyd Morgan) in refusing to regard the mental and the physical as correlated at all stages of evolution and in considering mind as characteristic only of a comparatively recent stage in the evolutionary order. Both theories, however, insist on the conception of types of unity or integration which are not the sum of their parts and are not deducible in any way from the character of their constituents either as occurring in isolation or as found in combination; on these premises must be rejected not only mechanism but also that form of vitalism which admits that apart from the intervention of a "vital force" living things act mechanically. (c) In Hobhouse's system the element of mechanism is given due place, but in living things it is regarded as qualified by teleological factors. The relation between mind and body is a relation between two modes of behavior and not between two substances. Teleology and mechanism are irreducible. Organism, on the other hand, is not a distinct category. The various forms of living things and their modes of behavior are explicable as due to varying combinations of the mechanical and the teleological factors. (d) Whitehead is more drastic and regards the whole conception of mechanism as applicable only to very abstract entities. Concrete enduring things are organisms in which the plan of the whole modifies the character of the subordinate or constituent organisms which enter into it. The principle of modification is not peculiar to living bodies but is perfectly general throughout nature. It is difficult to say how far physicists would go with Whitehead in his extension of the category of organism to all spheres of reality, and it is also difficult to ascertain whether the recent changes in physical theory really imply, as is frequently alleged, an

idealistic interpretation of reality. It remains true, however, that the rigidity and the primacy of the physical sciences have been shaken and that there is less confidence in the universality and necessity of mechanical explanation. One may quote the remark of Bridgman: "I believe that many will discover in themselves a longing for mechanical explanation which has all the tenacity of original sin. . . . [The physicist must] struggle to subdue this sometimes nearly irresistible but perfectly unjustifiable desire" (*Logic of Modern Physics*, New York 1927, p. 47).

The differences in point of view considered above naturally reappear in psychology. Corresponding to the mechanistic attitude are the epiphenomenalism characteristic of nineteenth century scientific naturalism, which regarded mental states as mere by-products or appearances having no real part in the effective order of nature; and now the behaviorist movement, which if not necessarily committed to philosophical materialism wishes to rid psychology of its subjective elements and methodologically at any rate to use only what can be outwardly observed. Corresponding to the vital force is the anima, or soul, whose states are supposed to be in a relation of parallelism or interaction with the bodily or neural processes.

Corresponding to what may be called non-substantial vitalism is the view of the mind as an emergent or novel form of wholeness (Lloyd Morgan and Smuts) or as an aspect or factor in behavior, namely the teleological, which in combination with the mechanical factor makes up its psychophysical organism (Hobhouse and C. S. Myers). The sharpest opposition is between those who regard mind as essentially purposive, conational or forward looking and those who regard purposiveness as merely apparent and as capable of explanation in terms of physiology or of a "stimulus-response" psychology. Compared with this cleavage the debate about instincts, that is, the existence of inherited and specific conational tendencies, is a relatively minor matter.

The sociological problems that arise in connection with the mechanist-vitalist controversy fall into two groups, those relating to (a) the unity of social aggregates and (b) the nature of social evolution. As regards the idea of unity, the applicability of the notion of emergent wholes to societies is hinted by Lloyd Morgan and has been further elaborated by Wheeler in his *Emergent Evolution and the Development of Societies*. But in a different form it is familiar to sociology. It was used by Wundt in his theory of

the general will, by Durkheim in his theory of collective representations and by many others who conceive of the group mind as more than and different from the sum of its parts. There is urgent need of an adequate classification of the forms of social grouping. It is clear that they do not all possess the same type of unity, and many are not unities at all. Nevertheless, the notion of functional, or non-substantial, emergence may prove fruitful, at any rate provisionally.

In the discussion of social evolution recent thought has been concerned to rid itself of the assumption of a single line of development which dominated some of the earlier sociologists. Here as in recent biology polyphyletic evolution is increasingly emphasized, and there is also a marked tendency to abandon the search for origins and to concentrate on functional analysis. Despite recent criticism, however, the notion of development properly interpreted retains its value in sociology. There is a process of cumulative and correlated growth, and drifts of great depth and continuity can be traced in all the large scale movements of culture.

To determine the conditions of this correlated growth remains an important sociological task, even though or rather because it is now recognized that the process is not unitary or regular. There remains also the problem whether after all there is not some unity behind the complex and conflicting processes of human history. Hobhouse has tried to show on the basis of an elaborate survey of the different phases of social development that on the whole and despite far reaching divergencies ever widening syntheses are effected and that the process of unification is an integral part of the movement of progress; and he has put forward the hypothesis that this growing unity reflects the increasing power of mind, gradually obtaining a firmer grasp over the conditions of its development but as yet not completely in control over them.

Driesch maintains that in history there is only cumulation, that is, the formation of systems by additions and interactions, but not evolution in the strict sense. His argument, however, rests on the questionable assumption that there is evolution only where there is a "superpersonal entelechy" guiding and animating the entire process.

From a different point of view Troeltsch in his *Historismus und seine Probleme* (in *Gesammelte Schriften*, vol. iii, Tübingen 1922) dismisses the unity of mankind as "a metaphysical fairy tale" inspired by the tendency to regard the

line followed by European peoples as the main highway of history and to measure all other civilizations by the degree to which they approximate or have contributed to European civilization.

This warning is important, especially in relation to the ambitious "philosophies of history" favored in the nineteenth century. At the same time it is clear that Troeltsch exaggerates the uniqueness and independence of the different cultures. No doubt they do in varying degree follow their own bent, but they are never wholly independent and the influence of culture contact is one of the best attested factors in culture development. It is therefore of the greatest importance to investigate the forms of contact and the resulting syntheses or mutual modifications. A study of the evolutions of cultures is thus also a study of the evolution of culture.

MORRIS GINSBERG

See: MÉTHOD, SCIENTIFIC; BIOLOGY; EVOLUTION; EVOLUTION, SOCIAL; PSYCHOLOGY; PHILOSOPHY; NATURALISM; MATERIALISM; IDEALISM; HUMAN NATURE; ORGANISM, SOCIAL.

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Interrelations (Boston 1927); Woodworth, R. S., *Contemporary Schools of Psychology* (New York 1931); Cohen, Morris R., *Reason and Nature* (New York 1931); Ginsberg, Morris, *Studies in Sociology* (London 1932).

MEDEM, WLADIMIR (1879-1923), Jewish socialist. Medem was the son of a Jewish military doctor in Minsk, White Russia. As a child he was baptized a Christian and was trained in the tradition of Christianity. At the age of fifteen, however, when he was a student in the *Gymnasium*, he began to associate with Jewish socialists. He broke off relations with his family, devoted himself entirely to the cause of the Jewish labor movement and became one of the most important leaders of the Jewish Social Democratic party, known as the Bund. He was often arrested and was exiled to Siberia, whence he fled abroad and returned to Russia after the first Russian revolution in 1905; he subsequently spent several years in the prisons of Vilna, Warsaw and Moscow and was finally sentenced to four years of forced labor in the fort at Warsaw but was released in 1915 by the German troops who occupied the city. Medem was interested in the problem of nationality; at a time when most Jewish socialist leaders were inclined toward a vague cosmopolitanism or favored the cultural absorption of the Jews by the respective dominant nations Medem was one of the first to put forth the demand for cultural autonomy for the Jewish minority in countries with compact Jewish populations. He was editor of several publications issued by the Bund in Yiddish and Russian and published *Fun mein leben* (2 vols., New York 1923), reminiscences which are of great significance in the history of the Jewish labor movement. Medem was for many years a member of the chief governing body of the Bund and participated as its delegate at the congresses of the Russian Social Democratic Workers' party and also at the International Socialist Congress of 1910 in Copenhagen. After the October revolution in 1917 he strongly attacked Bolshevism and on this account separated from his party, which became communistic. He moved to the United States and died in New York.

JAKOB LESTSCHINSKY

Consult: *Raiter pinkos* (The red book), 2 vols. (Warsaw 1921-24) vol. ii, p. 175-76; Michalevitach, B., and Shulman, V., in *Arbeiter luach*, vol. v (1924) 117-41; Reizen, S., *Leksikon fun der yidisher literatur*, 4 vols. (2nd ed. Vilna 1926-29) vol. ii, p. 441-50.

MEDIAEVALISM. See ROMANTICISM; PRIMITIVISM.

MEDIATION is the action of one or more states in suggesting to two or more disputing states a possible form of settlement of their dispute. The action may occur in peace time or during war between the disputants. The suggestion of a form of settlement by one of three or more states involved in a dispute may be included—the United States so acted in 1918—but not the suggestion of one state to another in a strictly bilateral controversy. The absence of any obligation to accept the suggestion made is an essential element in the situation.

Mediation thus rises one stage higher than good offices and remains one stage below arbitration or adjudication. In the former mode of procedure the third state confines itself to promoting communication between the disputants without making any reference to the subject matter of the controversy. In the latter the third state—or individuals not acting for either disputant—is authorized to prescribe the form of settlement and the disputants are bound to accept this decision. Mediation, however, resembles good offices and perhaps arbitration in that the suggestion made need not embody international law or justice.

Mediation grows out of simple diplomacy. Any state may make representations to another state on any matter of importance to itself which is affected by or affects the second state. Thus there is no obvious ground for mediatory action where the subject of dispute does not concern the mediator; for this reason mediation has been resisted at various times both in principle and in practise. The interest of the third state in seeing averted any grave impairment of friendly relations and peace among its fellow members of the international community has been held, however, where the facts justify such apprehension, to constitute the interest necessary to justify representation, including a suggestion of a settlement.

Mediation may in fact and in law be utilized to some extent in connection with intervention. While most actions of intervention are taken by one state toward a second individual state they may also take the form of mediation between the second state and a third, although if imposed by the first state upon either or both of the others the action would exceed the character of simple mediation, in which both the suggestion of a settlement and the proposed terms of settlement may freely be accepted or rejected by the disputants.

The action of mediation may be initiated upon

the request of one or more of the parties to a dispute. In such circumstances the third state may consent to serve or decline; likewise if one disputant requests the action and the third state is willing to serve, the other disputant or disputants may refuse to receive or consider the representations of the mediator unless the interests of the latter are affected. Conversely the initiative may be taken by the third state within similar limits of principle.

The action of the mediator is ordinarily prolonged until it amounts to repetition and revision of the suggestion for a settlement. The process of mediation may thus become seriously protracted and involved. The mediating state may well become a participant in consideration of questions and interests of which it was originally ignorant and with which it had no concern.

When the suggested formula has been accepted by the parties to the dispute it becomes binding upon them, whether given the form of treaty agreement or mere diplomatic understanding. Each party then has the right to employ all means recognized by international law for exacting respect for national rights—diplomatic demand, litigation, force short of war, war—within the limits of any treaty agreements restricting such action. But in the absence of special arrangements the mediator has no more power or right of enforcement in this connection than has the international community as such.

Attempts have been made in more recent years to lay foundations by treaty agreement for subsequent practise of mediation. States have pledged themselves to permit and to accept mediation in disputes in which they are concerned and, conversely, to offer and perform mediation when needed. The preservation of peace has been recognized as a matter of concern to every state and hence as a justification for mediation. Detailed procedure for investigating disputes, making suggestions of settlement and even, finally, for enforcing the formula suggested has been provided, although the last step seems to carry the action into the range of arbitration and something still higher; namely, international government. Such steps have been taken in numerous bilateral treaties, such as the Bryan peace treaties; agreements among the members of small groups of powers, such as the Treaty of Paris of March 30, 1856; and also in broader multilateral conventions, such as the Hague Convention for Pacific Settlement of International Disputes (arts. 2-8) and the Covenant of the League of Nations (arts. 11-16). When re-

garded from without, as a form of action for settlement of disputes, often performed by an international commission or organ such as the League Council, rather than from within, as an action of a mediating state, mediation is referred to as conciliation.

Historically mediation has been undertaken and accepted or rejected for a variety of motives apart from a desire to preserve peace. Third states have so acted with a view to seeing a certain solution adopted in a controversy between neighbors. Weak disputants have invoked mediation in order to gain support from the mediator against a stronger adversary. Strong disputants have sought mediation to justify imposition of a desired settlement upon a weaker state; for a state to be able to utilize mediation in this way the settlement sought must accord rather closely with international law. But the motive of preserving peace and escaping war, itself a motive of national interest of course, has been the most frequent cause of mediation in later years.

In the same way the use of pressure to secure acceptance of mediation and compliance with the formula suggested has varied and has occurred as often, in later years at least, in connection with mediation motivated by desire to preserve peace as it has in connection with mediation aimed at the terms of the settlement itself. The mediations of the Concert of Europe in the Balkans, of the United States in Latin America, of the western powers in the Far East, have been the product of a mixture of motives selfish and generous and have been accompanied by the use of pressure varying from zero to complete compulsion.

A variety of factors condition the probable success or the acceptability of mediation. Two weak states intimidated by and desiring to keep the favor of a great power are likely to accept the mediation of the latter and to act accordingly, as did Panama and Costa Rica in 1910; on the other hand, these same weak powers may on occasion, as in 1921, resist such action to the utmost. Two great powers or two groups of powers equally confident in their strength, such as the Entente and the Alliance on the verge of the World War, are not likely to be amenable. Japan demonstrated in 1931 that a strong state in position to exact from a weaker state a settlement satisfactory to itself will react in a similar manner. A state at the moment victorious but doubtful of its own ability to hold out and finally to secure a satisfactory settlement may prefer to escape by this path, as was the case with Japan in 1905. When

two states have more or less inadvertently become involved in a sharp controversy although neither wishes to be drawn into war—as, for example, Chile and Peru in 1926—they may be glad to yield to mediation. A community of states determined to prevent the outbreak of war will insist upon the employment of mediation, as did the League of Nations in the Balkans in 1925. Many other examples might be given to illustrate the general and obvious principle that because of its voluntary character the success or failure of the process of mediation depends upon the circumstances and the moods of the disputants.

Obviously the organization of mediation or conciliation should prevent the errors and abuses to which the practise is susceptible. These include failure to apply the procedure promptly when needed, refusal of the practise by prospective object states, sustained resistance to the suggested formulae of settlement with a view to defeating the operation of the process, employment of the practise by the mediator for purposes injurious to the object states, failure to respect a settlement agreed upon and failure to provide means of enforcement. This suggests that foundations for mediatory action should be provided in standing agreements which would avoid the necessity of securing consent when the action is needed, that commissions or other agencies should be immediately available to obviate the delay incident to selecting a mediator, that the process should be applied by the international community or agencies representing that community rather than by individual states, and that the machinery and procedure of conciliation should be integrated with any existing system of sanctions or international enforcement. Many of these conditions are actually being fulfilled in practise.

Mediation or conciliation is important in the field of international relations, in contrast to the situation among individuals, because of the still great although declining inclination of states to assert what they believe to be their interests and even to take violent action against one another. Moreover the greater cost and danger of armed conflict today, the relative dearth of accepted international law limiting national interests or defining national rights, the lack of international administrative machinery and of adequate law restricting the states in asserting their interests and rights against one another, all contribute to the necessity for mediation. It must be obvious, however, that certain serious defects are inher-

ent in the process. Even when organized as suggested above it still remains nothing more than an attempt to adjust political demands or, even where the demands are allegedly based upon international law, a search for a form of settlement not necessarily cast in terms of accepted law. At best it is a legislative rather than a judicial process, carried on only with the consent of the object states and hampered thereby, unless raised to the level of joint intervention and international government; in either case it is special ad hoc legislation with all the vices entailed therein, such as lack of general standards and necessary repetition. So long as this is true, international enforcement of recommended settlements must be hazardous and hesitant. That mediation has of late been more frequently practised or at least more frequently stipulated in international agreements and organized on broader and more effective lines is indicative primarily of an increased desire to escape war; if justice were the predominant goal in the conduct of international relations, not mediation but development of law and adjudication according to law would be sought. Mediation may be expected eventually to disappear from the practises of international organization; today it is one of the two most important and valuable of those practises.

PITMAN B. POTTER

See: INTERNATIONAL RELATIONS; INTERNATIONAL ORGANIZATION; DIPLOMACY; ARBITRATION, INTERNATIONAL; PEACE MOVEMENTS; INTERNATIONALISM; LEAGUE OF NATIONS; GREAT POWERS; INTERVENTION; WAR; AGREEMENTS, INTERNATIONAL; TREATIES.

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MEDIATION, INDUSTRIAL. *See* CONCILIATION, INDUSTRIAL.

MEDICAL JURISPRUDENCE, forensic or legal medicine, is that science which applies expert medical and cognate scientific knowledge to the elucidation of those problems with which legal authorities are confronted. It also deals with the legal responsibilities and privileges of the physician and with the legal enactments and

ethical considerations which particularly concern him in relation to his practise and to his fellows.

In addition to a general scientific knowledge the medical jurist must have considerable special knowledge to fit him to undertake the investigations required by the law. One of his most important duties is to give a decision as to the cause of death when there is doubt whether death was due to natural causes or to accident, suicide or murder. He must be familiar with the various changes that occur in the body after death and be able not only to deduce from these the approximate time of death but also to distinguish between such changes and those caused by violence before death. He must be acquainted with the developmental changes in the body from birth to old age in order that he may be able to give an opinion about the age and sex of unidentified remains and otherwise to aid in identification. It is essential for him to have an accurate knowledge of the infinite variety of wounds, the manner of their infliction, the nature of the weapons which caused them and the age of wounds and of scars. He must be especially familiar with wounds caused by firearms and he must be able to help in determining the kind and caliber of weapon and the direction and distance of fire. He must have an expert knowledge of the technique for the examination of blood and other stains to be able to prove their nature and origin. It is his province to deal with many varieties of sexual matters and problems connected with marriage, divorce, pregnancy, childbirth, abortion and infanticide. Since he may be required to deal with claims for compensation after injury and with cases of industrial disease and poisoning, the whole field of toxicology must come within his purview. Although the isolation and detection of poisons should be actually carried out by specially trained chemists, the medical jurist in order to be able to cooperate with them must have a thorough knowledge of the symptoms, signs and pathological effects of the various poisonous substances. Finally, since he may be called upon to decide whether a psychiatrist should be consulted, he must keep in touch with the subject of mental disease.

It may be asked whether any one man can possibly have all the specialized types of knowledge required by the medical jurist. The answer is obvious, for no single individual can acquire expert knowledge of all the branches of science which contribute to legal medicine. The medical

jurist, however, must have special knowledge concerning the application of those sciences to the problem under consideration and he must be able to advise about the choice of a specialist in a particular branch when required. In this way the chemist, the physicist, the botanist, the anatomist, the surgeon, the obstetrician, may be called upon to aid in a particular problem. Similarly the specialized knowledge of tradesmen of various kinds may be required. It is the function of the medical jurist to act as the liaison officer between the various specialists and the investigating or juridical authority.

It is difficult or impossible to obtain an idea of the early development of forensic medicine, for its origin lies far back in antiquity; so intimately is this science associated with human conduct that its development may be considered coeval with that of the social development of man, and particularly with the recognition or punishment of crime. In the days of the early Egyptians there are few allusions to the part played by physicians in the detection of crime, but there appears to be no doubt that there was a certain knowledge of poisons. The Jews made a distinction between mortal and dangerous wounds and had laws relating to virginity, marriage, adultery and other subjects of public medicine. There are few traces of the union between law and medicine in the works of the ancient Greek physicians. There are certain references to hygiene and state medicine scattered through the writings attributed to Hippocrates, some speculations on the nature and growth of the infant and on the period of pregnancy. Medical men were consulted by the magistrates most frequently on questions of public health and there is some evidence that they were commonly summoned to give evidence in courts of justice.

The laws of ancient Rome had their chief source and inspiration from those of Greece and were similar to them but they embraced more important medicolegal questions. In the reign of Numa Pompilius, six hundred years before the Christian era, it was enacted that the bodies of all women who died during the last months of pregnancy should be opened immediately, so that the infants might be saved if possible (*Dig.* 11,8,2). Scipio Africanus and the first Caesar were brought into the world by incision of the abdomen, hence the origin of the term, Caesarean operation. It was also enacted in the Twelve Tables that the infant in the mother's womb was to be considered as living and that all civil rights

were to be secured to it. The legitimacy of an infant was limited to birth within ten months of the death or absence of his putative father.

Many laws were promulgated during the reigns of Hadrian, Antoninus, Marcus Aurelius and Septimus Severus on the authority of Hippocrates and Aristotle. It is recorded by Suetonius (*Julius lxxxii*, 2-3) that the bloody remains of Julius Caesar when exposed to public view were examined by a physician named Antistius, who declared that out of twenty-three wounds which had been inflicted one only, which had penetrated the thorax, was mortal. The body of Germanicus was also inspected, and by indications conformable to the superstitions of the age it was decided that he had been poisoned. It does not appear that there was any positive law which required the inspection of wounded bodies by medical practitioners or that legislators required medical opinions before making laws. It is, however, recorded that by the beginning of the empire the midwives were ordered by the praetors to examine pregnant women in judicial inquiries. Galen (129-c. 199 A.D.) alluded to some questions of legal medicine: he remarked the difference which subsists between the lungs of an adult and those of the foetus, admitted the legitimacy of seven-months children and suggested a manner of detecting simulated disease.

The origin of the connection between the sciences of law and medicine in European law may be dated from the publication of the codification of Justinian (529-33), which required the opinion of physicians in certain cases. But from the period when the Roman Empire was overrun by the Goths and Vandals savage customs prevailed in the west of Europe and the principles of legal medicine were totally neglected, although here and there appeared a provision for taking the testimony of a physician in isolated cases, as in the laws of the Alemanni of the sixth century. Thus too Pope Innocent III decreed in 1209 that wounds were to be examined by a physician.

The modern beginnings of forensic medicine are, however, usually traced from the early part of the sixteenth century, for it was in 1507 that the bishop of Bamberg drew up a penal code in which the services of medical men were required to be utilized in all cases of violent death, a provision that was adopted almost immediately in Bayreuth, Anspach and Brandenburg. The other states of Germany resisted the introduction of the *Bambergensis* for a long period, but eventually Charles V in the Diet of Ratisbon in

1532 proclaimed as the law of the empire the criminal code since known as the *Constitutio criminalis carolina*. Like that of Bamberg, on which it was founded, this code, first published in 1553, required the evidence of medical men in all cases where their testimony could enlighten the judge or assist the investigation, as in cases of personal injuries, murders, pretended pregnancy, abortion, infanticide, hanging, drowning or poisoning. The publication of the *Carolina* very naturally attracted considerable attention and its provisions were soon copied by neighboring countries. In 1606 Henry IV of France authorized the appointment of two surgeons in every city and important town, whose exclusive duty it should be to examine all wounded or murdered persons and make reports thereon.

The promulgation of these new laws and the status accorded to medical men in the administration of the criminal law had the natural effect of directing attention to that new department of medical science. Many practitioners began to study forensic medicine and with its development a number of books were published bearing upon it. One of the earliest works was that by Ambroise Paré, which was published in 1573; this was followed in 1602 by a much more complete and comprehensive textbook by Fortunatus Fidelis of Sicily. The rapid progress of medical science in the seventeenth century, due especially to the work of Sylvius, Fallopius, Vesalius and Eustachius, led to similar advances in forensic medicine and to the publication from 1621 to 1635 of the classical work of a Roman physician, Paolo Zacchia, which dealt in considerable detail with the whole subject of legal medicine.

Although Italy undoubtedly led the way in placing forensic medicine upon a firm foundation, the science owes much to the critical investigations carried out in Germany and in France. The earliest important treatise in Germany was written in 1689 by Johannes Bohn, who in 1704 produced a more comprehensive and enlarged work. The famous pandects of Valentini (*Corpus juris medico-legale*, Frankfort 1722), in which the current knowledge of forensic medicine was ably summarized, was by many considered to be equal in importance to the work of Zacchia. Numerous books were published in German countries in the eighteenth century; among these should be mentioned the work in six volumes by Michael Alberti of Halle in 1725-47, the many works of Anton Störck on poisons, the work in three volumes of Albrecht von Haller in 1782-84

and the work of J. J. Plenck of Vienna in 1781. In the same period French writers published many works; the most important were those of François Emmanuel Fodéré in 1799 and 1813; the latter was probably the most important contribution up to that date. In 1813-15 France again contributed to the advance of the science of forensic medicine by the publication of M. J. B. Orfila's great work on toxicology.

During this period chairs in forensic medicine were established in Germany, France, Italy, Austria and Poland and in many centers it became a regular subject of instruction in the medical curriculum.

In Great Britain little interest was taken in the subject as a separate division of learning and such investigations as were made were in the general field of medicine and surgery. A small book was published by William Dease of Dublin in 1783 and another by Samuel Farr of London in 1788, but neither of these was of any particular importance. In 1816, however, Male of Birmingham was the author of the first systematic book which had any pretensions to completeness, and this was followed in 1821 by another important book by John Gordon Smith. In 1829 Sir Robert Christison of Edinburgh issued his work on toxicology, which although it showed the influence of Orfila, under whom Christison had worked, was in advance of all previous studies. After this period a number of textbooks appeared, the most important of which were that of Michael Ryan in 1831 and the advanced and comprehensive work of Alfred Swaine Taylor in 1836; the latter when completed in subsequent issues took its place as the most authoritative work in the English language, a position which it still retains.

Forensic medicine was not taught in Great Britain until about the year 1791, when the elder Andrew Duncan, a professor at Edinburgh University, began a series of lectures. Some years later in 1807 the first chair of forensic medicine in Great Britain was instituted by George III in the University of Edinburgh, its incumbent being Andrew Duncan the younger. In the following years medical jurisprudence was taught as a special subject in many schools; chairs were established in certain of the universities, and in 1833 it became an obligatory subject of study for all medical students in Great Britain.

Since the literature of the United States was mainly derived from British sources, the American development of forensic medicine followed along similar lines. As early as 1810 Benjamin

Rush delivered a lecture in the University of Pennsylvania in which he emphasized the importance of the study of medical jurisprudence. The first course of lectures on the subject was given by James S. Stringham in 1804 at Columbia College. Courses were soon established elsewhere: at the College of Physicians and Surgeons of New York (here James S. Stringham continued the Columbia College course); at the University of Pennsylvania by Charles Caldwell; at Harvard University by Walter Channing; and at the Western College of Physicians and Surgeons in New York state by Theodor R. Beck, who published in 1823 a most complete manual of medical jurisprudence, which became the standard textbook in the United States and attained a high reputation in the British Isles.

The value of the specialized study of forensic medicine became so obvious in the nineteenth century that separate medicolegal institutes were founded in most of the countries of Europe. These institutes were commonly associated with the universities and controlled by the professor of forensic medicine. They kept, however, in close touch with the judicial authorities, made the necessary examinations of injured persons, investigated cases of violence to the person and performed postmortem examinations of the bodies of those who died in suspicious circumstances. The usefulness and the scope of these institutes have steadily increased. As a general rule persons skilled in analysis are on their staffs to carry out the analytical investigations in cases of poisoning and the like; and facilities for histological, microscopical and serological examinations are available as well as equipment for modern X-ray and electrical diagnosis.

In Denmark the professor of legal medicine is chairman of the Superior Board of Legal Medicine appointed by the government and medicolegal expert to the courts of justice. All legal autopsies in the country are required to be made either at the institute or by a special state dissector. The fact that the whole of the laboratory work for legal purposes in Denmark is performed in the institute is of great advantage to the state and of inestimable benefit in the training of members of the medical and legal professions. Thus in Denmark an institute originally intended for university instruction has become a center for medicolegal and scientific police investigation of every kind throughout the country.

Similar conditions, varying according to the different systems of law, prevail in most other

European states. In Egypt the medicolegal institute is a state department. The staff of the central laboratories in Cairo, all members of which are full time civil servants, consists of specially trained medical men and qualified analysts; and facilities are present for all varieties of special diagnoses and for every type of scientific investigation of medicolegal cases.

No medicolegal institutes exist in England. The investigation of cases of sudden, violent or unexpected deaths is the function of the coroner, who may appoint any medical practitioner to perform an autopsy or such other examination as he thinks fit. There is no law which requires special qualifications for medicolegal investigations. In practice, however, most of the laboratory work is entrusted to specially qualified persons. Injuries, assaults and similar cases are investigated as a rule by the police surgeons and many of these have by experience become highly expert in this branch of legal medicine. Even the Criminal Investigation Department in Scotland Yard retains no scientific experts on its staff, and there is no arrangement by which the mass of medicolegal material in London may be made available for teaching and research.

In Scotland, where the legal system is different from that in England, there is no public inquiry into deaths but an official known as the procurator fiscal privately investigates all cases of sudden and violent death and reports to the Lord Advocate's Department the result of his inquiry. This official has authority to call upon any medical practitioner to make such examination as he requires. Although there are no special medicolegal institutes there are well equipped departments of forensic medicine in the Scottish universities and these offer the authorities full facilities for scientific criminal investigation.

Conditions in Canada are even less favorable than in Great Britain. Legal medicine has little if any standing and is not taught as a separate subject in most of the Canadian schools. The tendency has been to group it with pathology; this would have many advantages if greater co-operation were to exist between the medical schools and the coroners and if a special course in legal medicine were to be provided within the schools.

Nor do medicolegal institutes exist in the United States; as a subject of study forensic medicine has not received the attention which one would have expected in view of the progressive outlook in most branches of science in that country. The conditions of teaching and

practise show signs, however, of improvement. In certain localities, such as Boston and New York City, the coroner system of inquiry into sudden and violent deaths has been superseded by the appointment of medical examiners. The change was made in Boston in 1877 and in New York in 1918. The present system places the responsibility of ascertaining the cause of death upon the medical examiner and the legal responsibility upon the courts. At the present time the office of the medical examiner of New York City fulfils many of the functions of a medico-legal institute but without proper facilities. This officer investigates all cases of death from violence whether accidental, suicidal or homicidal; all cases of death from criminal negligence, criminal abortions and the like. He has also important functions with reference to compensation claims. There are no special laboratories belonging to the service but accommodation is obtained at the Bellevue Hospital and at the city morgues. Between two and three thousand autopsies are performed annually and about twenty thousand chemical analyses, including routine examinations for methyl and ethyl alcohol. Although there is thus ample material for teaching and research, there is insufficient coordination between the medical schools and the office of the medical examiner in connection with teaching, and the great supply of available medico-legal material has so far as this purpose is concerned been allowed to go to waste. Since, however, the medicolegal work has been centralized it only requires coordination and greater facilities to enable a great extension to take place in research and teaching, and when this is achieved New York City should become a world center for medicolegal study.

Within the past decade considerable advances have been made in many parts of the world in forensic medicine. The scientific investigation of firearm injuries has been taken up in most countries and especially in the United States. The identification of projectiles and the weapons from which they have been fired has reached a high degree of accuracy, as has the identification of traces of powder and metallic debris about wounds. Marked advances have occurred in the examination of bloodstains and the identification of the source of blood. Landsteiner and his coworkers have advanced the knowledge of the agglutinins of the blood, and not only has the identity of four groups and two subgroups been definitely established and a technique evolved for identification of the group of dried stains

but the adaptation of the test to the diagnosis of paternity has been made more certain. Further work on the specific group agglutinins of blood, on seminal secretions and various tissues is actively being carried on, and in time no doubt it will be possible readily to distinguish between male and female blood and to devise a test to prove the individuality of bloodstains. The use of X-rays, ultraviolet and infra-red rays is advancing as a valuable aid in investigation. A large number of experiments involving the examination of the blood and urine for alcohol have furnished a new means of dealing with cases of drunkenness, and the test should now be applied to every case of death from unknown causes. Examination of the blood for gaseous poisons including carbon monoxide has also advanced considerably within the past few years, and no doubt blood examinations will be greatly extended in the future.

There are still enormous fields for research; and since every medicolegal case involves the possibility of the loss of life or liberty of a human being and since the whole of the work of forensic medicine is of intense social interest and importance, it is obvious that each year the importance of this branch of science must increasingly force itself upon the public mind and that in time no person without special training in forensic medicine will be entitled to give evidence in a court of law on a medicolegal problem.

SYDNEY A. SMITH

See: MEDICINE; CRIMINAL LAW; PROSECUTION; EXPERT TESTIMONY; EVIDENCE.

Consult: The literature on medical jurisprudence is extremely voluminous. The present bibliography includes only some of the leading treatises of which there are editions published in the present century. These usually contain ample references to the older literature. Some of the leading English treatises are: Glaister, John, *A Text-book of Medical Jurisprudence and Toxicology* (5th ed. Edinburgh 1930); Lucas, Alfred, *Forensic Chemistry and Scientific Criminal Investigation* (2nd ed. London 1931); Lyon, I. B., *Lyon's Medical Jurisprudence for India*, ed. by L. A. Waddell (8th ed. Calcutta 1928); Smith, F. J., *London Hospital Lectures on Forensic Medicine and Toxicology* (3rd ed. by G. Jones, London 1929); Smith, S. A., and Glaister, John, *Recent Advances in Forensic Medicine* (London 1931); Taylor, A. S., *Taylor's Principles and Practice of Medical Jurisprudence*, 2 vols. (8th ed. by S. A. Smith, London 1928). Some of the leading American treatises are: Hamilton, A. McL., and others, *A System of Legal Medicine*, 2 vols. (2nd ed. New York 1900); Herzog, Alfred W., *Medical Jurisprudence* (Indianapolis 1931); Kessler, Henry Howard, *Accidental Injuries; the Medico-legal Aspects of Workmen's Compensation and Public Liability* (Philadelphia 1931); *Legal Medicine and Toxicology by Many Spe-*

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MEDICAL MATERIALS INDUSTRY. Although the specific values of some drugs were known independently of the magical practises commonly associated with their use in earlier societies, scientific knowledge of the use of drugs may be said to date from Hippocrates. Dioscorides and Galen made the outstanding ancient contributions in the field of materia medica, and their works remained the primary authorities on the subject for many centuries. The lay apothecary did not acquire status until the development of Arabic science and pharmaceutic art; the separation of pharmacy from medicine was recognized in the eighth century. Noteworthy among the attempts to define the function and regulate the services of apothecaries was that in the constitution put in force by Frederick II in Sicily about 1241; this constitution classified the pharmacists into two groups—the *stationarii*, who sold simple drugs and preparations, and the *confectionarii*, who dispensed the prescriptions of physicians—and placed all pharmaceutical establishments under the surveillance of the college of medicine at Salerno. The first association of pharmacists was organized in Bruges in 1297; in the following centuries those engaged in the preparation of medicines gradually came to be considered as performing an independent specialized function of public health service.

The manufacture and distribution of drugs and medicines are now universally recognized as professional procedures. At the same time the commerce in crude materials entering the pro-

duction of drugs and medicines, the business relations between manufacturers, wholesalers, retailers and consumers and the fact that medicines are commodities bring into the medical materials industry all of the usual manifestations of trade. Manufacturers, retailers, advertising men and promoters of various drugs openly compete with one another and with the medical profession in the diagnosis and treatment of disease and through specious claims entice consumers to try advertised panaceas. Control over the products of the medical materials industry therefore becomes imperative as a public health measure. Regulations designed to eliminate frauds have nevertheless been established with difficulty and the necessary authority for enforcement is as a rule grudgingly provided because of the reluctance of most governments to interfere with business. The paradox frequently arises whereby a government department of commerce actually engages in fostering trade in medicines which are frowned upon by health departments. Federal and state laws (*see* FOOD AND DRUG REGULATION) have therefore been less stringent and less effective than the private control exercised by professional medical organizations. In the United States the Council on Pharmacy and Chemistry of the American Medical Association has set up standards with which a product must comply before it can obtain the stamp of approval which places it in the class of certified remedies: it must have a history of usefulness established by clinical evidence and laboratory examination, must meet exacting tests for purity and uniformity and must not be advertised to the laity. Chemical formulae, patents and tests must be revealed to the council, which publishes them annually. The council does not object to distinctive trade names coined by manufacturers to identify their particular brand of a standard product, if such names are indicative of the composition of the product; the names must not, however, indicate therapeutic action. In other countries there are comparable agencies which function in the same capacity as does the council. In most Latin American states manufacturers and distributors of pharmaceutical products must be licensed; detailed information regarding the products must be presented before a license is issued. Most countries seek to maintain strict control over the manufacture of biological products through public health departments, which issue licenses only to well equipped laboratories and make periodic tests to assure competence on the part of the manu-

facturer. In recent years some research workers have patented their discoveries and have given the control of the manufacture of the products to foundations, which require the licensed manufacturers, carefully selected on the basis of competence, to submit samples of each lot for test purposes. The control over the manufacture of insulin exercised by the University of Toronto and that over viosterol by the Alumni Research Foundation of the University of Wisconsin are examples of this rigid method of assuring standards, which has been attacked by organizations that have suffered financially through its functioning.

When manufacturers develop new therapeutic agents they find it more difficult to obtain satisfactory clinical trial than when the remedial agent is produced in a university laboratory, especially where the university has a medical school which is in a position to cooperate; manufacturers therefore endeavor to foster close relations with university laboratories. Transfer of the production of a newly discovered therapeutic agent from the university experimental laboratory to the factory is often effected by purchase of the product or by the employment of the discoverer. Sometimes a scientist on the verge of the discovery of an important remedial agent is persuaded to change his base of operations to the manufacturing laboratory in time to give the manufacturer the full benefit of the publicity attending the announcement of the discovery.

National pharmacopoeias, prepared in most countries under governmental auspices, in which the standards for medical materials are carefully outlined and formulae for the production of standard preparations are given, are published for the purpose of maintaining uniform standards for potent remedies. In the United States the national pharmacopoeia first appeared in 1820 and has since been revised at ten-year intervals by a convention of physicians and pharmacists which formulates policies and a revision committee made up of physicians and representatives of pharmacy and allied sciences. The standards of the pharmacopoeia have the force of law because the federal Food and Drugs Act recognizes the pharmacopoeia as an official standard for the drugs and medicines listed. Efforts at international cooperation in the formulation of drug standards have been made and several international conferences have been held, which have resulted in the adoption of uniform standards for certain potent drugs and preparations. The League of Nations through its health

committee has recently assisted in formulating such international standards.

The vegetable drug industry, usually referred to as the crude drug industry, supplies the manufacturers of pharmaceuticals with the drugs from which tinctures, fluid extracts, solid extracts and active chemical principles in the form of alkaloids, glucosides and other complex organic compounds are derived. The crude drugs are gathered in their native habitats and are shipped to centrally located crude drug houses, where they are carefully graded and sold directly to manufacturers either whole or ground. Large manufacturing concerns deal directly with growers or gatherers of such crude drugs as they may require in quantity. Some crude drug houses and manufacturers maintain farms in their own countries for cultivating drugs; it has not been found profitable, however, to cultivate drugs in competition with the supply from areas where the plants are native and where labor for harvesting can be obtained cheaply. Crude drug imports to the United States totaled \$8,800,000 in 1930. Manufacturers of bulk chemicals supply both inorganic and organic chemicals in large quantities to the drug manufacturers. Animals for the manufacture of serums, vaccines and other bacterial products are procured from breeders and germ cultures from hospitals. The meat packing industry is depended upon to furnish glands and organs for glandular extracts and preparations and for the various hormones and digestive ferments. The fishing industry supplies livers of cod and halibut from which the respective oils containing vitamins are extracted.

Manufacturers of drugs and medicines may be classified into three general categories according to their major activity: first, those who produce standard non-secret preparations and specialties which are intended to be dispensed only upon the prescriptions of physicians; second, physicians' supply houses, which manufacture standard formulae to be dispensed by physicians directly to their patients; and third, patent medicine manufacturers, whose products are frankly intended for direct sale to the public. The first group, often designated as ethical manufacturers, also frequently supply physicians and make patent medicines. In 1929 sales by manufacturers of druggists' preparations, including patented products as distinct from patent medicines as well as non-secret home remedies, totaled \$125,000,000 in the United States. In the same year sales of patent or pro-

proprietary medicines by manufacturers amounted to about \$155,000,000; the sales by specialty manufacturers totaled approximately \$57,000,000; and the total sales by manufacturers of all types of medicines amounted to about \$337,000,000, whereas in 1914 the last amounted to only \$134,000,000. The total costs of medicines to the consumers of the United States in 1929 is estimated to have been \$715,000,000; \$190,000,000 of this amount was spent for physicians' prescriptions compounded by pharmacists, including medicines dispensed by physicians and hospitals; \$165,000,000 was spent for non-secret home remedies; and \$360,000,000 for patent medicines. In 1929 the 1522 establishments manufacturing patent medicines employed 16,434 wage earners and the 429 establishments producing other pharmaceutical products employed 10,688 wage earners. In the first group wages represented about 6 percent of the value of the products and materials about 29 percent; in the second about 10 percent of the value of the products was represented by wages and about 35 percent by materials.

Exports of medicines from the United States were approximately 6 percent of the total national production in the decade between 1920 and 1930; in 1930 they totaled \$16,500,000, 44 percent of which represented trade with Latin America and 6 percent trade with Canada. Imports of finished medicines were about 1 percent of total manufactures. Both Germany and the United Kingdom are larger exporters of prepared medicines than is the United States; in 1929 Germany exported about 12 percent of a national output of \$156,000,000, and the United Kingdom in 1927 exported 15 percent of a total production of \$72,000,000.

Ownership and control of the manufacture and distribution of drugs are highly concentrated, especially in the United States. McKesson and Robbins, Inc., organized in 1928 as a holding company to manufacture drugs, chemicals and pharmaceutical products, had total net sales of \$134,865,000 in 1930 and net operating profits of \$3,460,000. The company owns substantially all the common stock of many wholesale distributing companies. Drug, Inc., a holding company organized in the United States in 1928 through a series of mergers and combinations of manufacturing and distributing agencies covering the medicinal, chemical and pharmaceutical fields, had a total sales volume in 1929 estimated at \$175,000,000. It operates more than 1500 chain retail drug stores in the United States and

foreign countries, controls the distribution of certain proprietary products through 10,000 others and markets to other retail drug stores widely known patent medicines and non-medical products manufactured in its own subsidiary factories. The United Drug Company of Boston, a part of the Drug, Inc., merger, controls about 700 Liggett Drug Stores in the United States and about 900 Boots Drug Stores in England. The sales of Parke, Davis and Company total from \$35,000,000 to \$40,000,000 annually; in 1929 the company showed a net income of \$8,381,000.

State and municipal governments have entered the drug market with the manufacture of serums and vaccines; such products as diphtheria antitoxin, for example, are manufactured in some states and municipalities under the direction of health departments and are distributed at cost to public hospitals and for use in immunizing school children against various contagious and preventable diseases.

There were approximately 500 wholesale druggists operating throughout the United States in 1929; most of these were located in large cities and important trading centers, and each served retail drug stores usually within a radius of one hundred miles. The total annual business of wholesale distributors of the drug trade amounts approximately to \$1,000,000,000, about 35 to 40 percent of which accounts for sales of drugs and medicines, while the remainder represents sundry merchandise.

Both retail dealers and manufacturers are extending their activities to absorb the functions originally performed by the wholesale druggists. Chain stores are able to obtain complete stocks of goods through direct negotiation with manufacturers and to maintain warehouses at strategic points to supply their various units. Groups of independent drug stores have organized wholesale companies to serve their needs in a given territory and thus obtain merchandise at prices which enable them to compete more readily with chain store organizations. This has led in turn, especially in the United States, to cooperative action of independent wholesale firms and to the organization of a chain of wholesale distributing companies.

In the British Empire physicians' prescriptions are compounded and drugs are sold at retail in chemists' shops but patent medicines may be obtained elsewhere. In continental Europe the number of pharmacies is restricted according to the size of the population, and the

compounding of prescriptions as well as the sale of drugs is more carefully regulated than in the United States and Great Britain; patent medicines and packaged domestic remedies may, however, be sold through agencies not supervised by qualified pharmacists. In the United States approximately 90 percent of all drugs and medicines is distributed to the public through supervised pharmacies, of which there were 60,000 in 1929. The development of machine production of pharmaceuticals has left its mark on the retail pharmacies in that it has reduced the function of the apothecary in many cases to that of dispensing prepared medicines. Physicians' prescriptions are still compounded by the pharmacist, but many of these merely call for preparations of manufacturers. Sometimes physicians combine in one prescription two or more prepared medicines with certain additional simple ingredients, but often the prescription requires only the transfer of liquids, pills or tablets from bulk containers to bottles, boxes or vials, which are then turned over to the consumer. It is estimated that in 1929, 165,000,000 prescriptions were filled in the drug stores of the United States; some pharmacies specialize in the filling of prescriptions to the practical exclusion of all other business. The total annual sales of retail drug stores are approximately \$1,650,000,000; about 37 percent of this total comprises drugs and medicines, of which 28 percent covers the sale of patent medicines and drugs and medicines sold directly to the public without physicians' prescriptions. Hospital and sick room supplies account for an additional 5 percent, while the remainder represents largely the sale of sundries. The promotion by manufacturers of common drugs under copyrighted trade names makes it necessary for pharmacists to carry duplicate products, increases their overhead costs and adds to the costs of drugs to the consumer.

ROBERT P. FISCHELIS

See: MEDICINE; PUBLIC HEALTH; FOOD AND DRUG REGULATION; ADULTERATION; CONSUMER PROTECTION; PROFESSIONAL ETHICS; STANDARDIZATION; PATENTS; DRUG ADDICTION; OPIUM PROBLEM.

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MEDICI, Florentine merchant family and dynasty. Like scores of Florentine families before them, the Medici rose from humble circumstances by their commercial enterprise. They began to gather strength about 1400, when under the guidance of Giovanni (1360-1429) the Medici trading company became the leading Florentine firm. In conformity to the traditional practise of such companies the Medici combined the operations of a bank with an international trade in commodities, particularly wool, cloth, silk, leather, alum and furs. It was only under Giovanni's successors, however, that their mercantile undertakings, favored by concessions from France, England, Burgundy, the papacy and the monarchs of the Orient, attained great dimensions. Giovanni himself owed his wealth chiefly to his activities as a money lender. He became the banker of the papacy, and this lucrative connection served ever afterward as the main pillar of the Medici fortunes.

Accepting the contempt of the merchant oligarchs then ruling the republic of Florence, the *novus homo* Giovanni steered clear of politics, but prudently strengthened his hand against the magnates by currying favor with the people. At his death he was regarded as the leader of the discontented industrial workers excluded from control. No sooner had his very capable son Cosimo (1389-1464) assumed the succession than the storm broke, and when the sky cleared in 1434 Cosimo was ensconced in power. Mindful, however, that his power was of popular origin and that Florence still cherished its republican traditions, he retained the old constitution based on the guilds, particularly the merchant guilds. The sole change due to the Medicean revolution was that Cosimo replaced the

former oligarchs and by building up a following from his own class of the new rich controlled political appointments. As a "political boss" cautiously avoiding both office and display, Cosimo governed Florence until his death. His system was continued during the reign of his son Piero (1416-69).

Piero's son, Lorenzo the Magnificent (1449-92), abolished the old constitution in favor of a more direct rule; at his premature death the Magnificent was fairly on the way to becoming a prince in name as well as in fact. Playing a far more glamorous role in international politics than had his predecessors, he paid for his political triumphs at home and abroad with the decline of the family business. The bank, which had branches in all the great European centers, went in for governmental loans, from which it suffered disastrous losses, particularly in the case of loans to the English crown and the house of Burgundy. Lorenzo managed to avert bankruptcy only by dipping into the public treasury, so that toward the end of his rule the affairs of the firm were inextricably entangled with those of the state.

In 1494 when the invasion of Italy by the French king Charles VIII destroyed the precarious equilibrium among the small Italian states, the whole edifice of Medicean power collapsed overnight. The Medici were driven into exile and the bank on which their political power had been reared disappeared in the general turmoil. Although they came back from exile twice and after their second return, in 1530, converted Florence into a principality, they owed their elevation no longer to their money power but to an identification with the papacy which Lorenzo had effected by having one of his sons, Giovanni (1475-1521; Pope Leo X from 1513),

made cardinal. Both Leo and a second Medicean pope, Clement VII (pope from 1523 to 1534), exerted all their influence to restore the family. But as the main line died out shortly after the second restoration, it was the secondary line which achieved hereditary rule, first as dukes of Florence and later as grand dukes of Tuscany.

It was the good fortune of the Medici to rise to power in that century and town which saw the birth of the modern spirit. Fully sharing the intellectual interests of their fellow citizens, they achieved, particularly in Cosimo and Lorenzo, a degree of cultivation which enabled them to exercise as fruitful a patronage of learning and the arts as is recorded in history. Not only did they support scholars and writers but they assembled the first great public library. As for the arts in all their branches, so thoroughly did the Medici identify themselves with the brilliant galaxy of Florentine architects, sculptors and painters that the whole period is not improperly called the Age of the Medici.

FERDINAND SCHEVILL

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MEDICINE

HISTORY.....	KARL. SUDHOFF
MEDICAL EDUCATION.....	HELEN R. WRIGHT
ECONOMIC ORGANIZATION.....	LEWIS WEBSTER JONES
	BARBARA JONES

HISTORY. The earliest practise of medicine was probably surgery performed in the treatment of injuries which man sustained in his struggles with fellow men or with wild animals. Hit and miss attempts to deal with emergencies led to the important discovery that the flow of blood can be stopped through pressure. Trephining of the skull was skilfully practised in many primitive societies. Most prehistoric med-

icine, however, was magic, which also played a leading part in the recorded healing art of the Near East.

The physician (*axû*) in the Code of Hammurabi (c. 2000 B.C.) was a surgeon who was paid like an artisan. The medicine men were priests who also dispensed and recorded the caste knowledge of empirical therapeutics. The beginnings of hygiene are to be found in Babylonia

and other countries in the ritual purification of the body through immersion in baths or natural streams. Cuneiform medical texts contain both incantation rites and therapeutic prescriptions of vegetable, mineral and animal substances. People afflicted with skin diseases regarded as contagious were segregated from the rest of the population or were "cast out" beyond the boundary stones and left to the mercy of wild animals—only later were special houses built for them by the Greeks and early Christians. The therapy of the Babylonian priests included besides magic potions and charms the application of irrigations, compresses, bandages, plasters and salves. The medical texts deal with all the organs of the body, including eyes, ears and teeth. No surgical texts in the strict sense of the term have been discovered, although military communications suggest that in the late Assyrian periods clinical surgery was based on fixed rules which gradually became ossified.

Fragmentary records from the Old Kingdom in Egypt in the third millennium B.C. reveal remarkable practises, including the stitching of wounds; trephining, however, was unknown. Surgical treatments of swellings caused by insects, and blood letting, cupping and irrigations are found in a fragment of this period discussing veterinary practise which makes no mention of charms; but the latter are present in a contemporaneous fragment dealing with gynaecology. Clinical data accompanied by attempts at prognosis are found in the Edwin Smith and Ebers papyri, which constitute the chief sources of information on Egyptian medicine. In the period covered by these papyri the diagnostic art of the old Egyptians, applied also to internal diseases, reached its highest degree of proficiency. Liver and spleen enlargements were recognized; secretions, especially of urine and perspiration, were studied; and a kind of auscultatory examination was made on the chest and abdomen. Veins and tendons were an important feature of the structure of the body according to the Egyptians; representations of the vascular system are found in three medical papyri, in which incantations are given considerable attention. The priestly and noble castes devoted a great deal of attention to cleanliness, the former resorting to circumcision of women as well as men. At an early date tests were formulated for determining pregnancy and fertility of women. But by the time of the Middle Kingdom progress in medicine had ceased, probably as a result of caste restrictions on medical knowledge. The medicine and

hygiene of the ancient Jews were influenced by both Babylon and Egypt. Their enforcement of circumcision as a tribal mark, of the dietary laws, of strict meat inspections, and the segregation of contagious diseases, especially of Biblical leprosy (*tzaraath*), represent important hygienic practises.

The healing art of Greece marks a great achievement in the history of medicine. Through the Hittites the knowledge of the Near East came to the Ionians and to the southern Dorians, who excelled in pure medicine. Although in some fields the Greek physicians were anticipated, the Greeks may be said to have created the science of medicine. The teaching and practise of the Coan school of medicine was certainly related to the surgery revealed in the Edwin Smith papyrus; the Cnidian school, on the other hand, appears to have had its roots in Asia Minor, Mesopotamia and Persia. The basis and presuppositions of Greek medicine are to be found in the speculations of the Ionian nature philosophers, for Greek medicine owes its origin not to the priestly healing practises of the Aesculapian temples but to the ideas of philosophers like Thales, Anaximander, Xenophanes, Heraclitus, Anaxagoras, Pythagoras and Empedocles. Only the incomparable ethical ideals which inspired the early Greek physicians originated in the temples.

The prototype of all Greek medical heroes was Hippocrates, a native of Cos, who not only mastered Greek medical knowledge but contributed to its advancement by his studies of epidemic diseases. He was the first to deal in a systematic way with the relation of hygiene to the varying conditions of climate, soil and water. The clinical medicine of his time was set forth and systematized by his school, which also brought to light the medical knowledge of the Cnidian school. To appreciate the progress made by the Coan school one need only compare the scientific character of the Hippocratic book the *Wounds of the Head* with the stumbling attempts of the Egyptians as revealed in the Edwin Smith papyrus. Although Hippocrates did not follow the example of the Egyptian and Mesopotamian physicians, who attempted to treat extremely difficult cases, the *iatrieia*, or surgeries, in the houses of physicians offered such patients opportunities for prolonged medical care and immediate aid of the type dispensed in modern private clinics and public hospitals. The advances in national hygiene brought about by the public character of Greek medical service cannot

be overestimated. Medical assistance was given to Greek citizens free of charge by physicians who were engaged at fixed salaries covered by special taxes. Public bathhouses, often directly attached to wrestling and athletic grounds, were supported either by public funds or by gifts of wealthy citizens and were widely used in Greece and in the colonies by men and at certain times also by women. The communities offered to all citizens facilities for physical culture and training as well as medical treatment in case of accidents. The athletic institutions were equipped with medical staffs; Galen, for instance, was for many years the head physician of the *gymnasium* of Pergamum, his native city. The Dorians, motivated by the desire to encourage the procreation of vigorous and healthy offspring, devoted attention to the physical training of women. Xenophon's admonition to his fellow citizens to imitate the rigid gymnastic training of the Persian noblemen is perhaps an indication of decadence.

The spirit of emulation and competition which dominated Greek life and contributed to its progress found expression in the rivalry between the schools of Cos and Cnidus. One school centered its interest in the body as a whole and its pathological and physiological manifestations; the other was concerned with study and clarification of the functions and disturbances of the separate organs: of the alimentary canal and its glandular equipments, of the respiratory and circulatory systems, of the formation and secretion of urine, of the sex organs of men and women. Festival games and contests for the prizes of the Asclepiads and Heracleteans were given on the *Triopios* of Cnidus as well as later in the Aesculapian temples of Cos.

In the case of the early medical school of Cyrene, which presumably derived its knowledge from Egypt, no names of members have been preserved. Nor is there any definite information concerning the medical school on the island of Rhodes: even the exact place of its location is unknown. More is known concerning the schools of southern Italy, especially the Sicilian which developed its doctrines in opposition to the Hippocratic school; the latter, repudiating the clinical case method to which it had formerly assigned a central position, ended in dogmatism and a system of fixed scholastic rules. The rigidity of the Hippocratic school also gave rise to other opposing tendencies, which found expression in schools headed by great personalities, such as those formed by Herophilus and Erasistratus in Alexandria, where the

foundations of human anatomy were established in the fourth century. The empirics under the leadership of Philinos the Coan put chief emphasis upon observation, oral tradition and the method of analogy and contributed materially to medical progress. During this period also pharmacology developed in Alexandria, the emporium of the eastern drug trade.

The anatomical science of Alexandria gave a powerful stimulus to Greek surgery. With the shifting of the center of medical learning from Alexandria to Rome a new movement gained ascendancy under the leadership of Asclepiades of Bithynia, whose treatment of disease was a combination of diet, gymnastics, massage and hydrotherapy and whose success was due to the efficacy of his therapeutic method. The movement was described in the eight medical books of an encyclopaedic handbook written by Celsus in the skeptical spirit of the empirical school. These popular books embody the three principles of Greek medicine: rational regimen, pharmaceutic treatment and surgery. Written in the days of Tiberius at the beginning of the Christian era and forgotten throughout the Middle Ages, they were brought to light by Simon of Genoa about 1300; they called forth general admiration and exercised wide influence during the Renaissance.

The chief contribution of imperial Rome to public hygiene was the establishment of public baths throughout the empire. The ideal of living in accordance with nature, popular among the followers of the stoic philosophy, gave rise to the influential pneumatic school of medicine. Founded in Cilicia by Athenaeus of Attalia, a brilliant physician who lived during the reign of the emperor Claudius, this school was further developed under Trajan by the Syrian Archigenes of Apamea, whose doctrine is strikingly evident in the excellent book of Aretaeus. The pneumatic doctrine brought the older humoral pathology into harmony with the fashionable stoic philosophy and modernized it through an emphasis upon the *pneuma* and its bearing upon disease. At the same time the methodist school continued active; Soranus of Ephesus, who lived shortly before Galen, worked out doctrines concerning midwifery and diseases of women and dealt in a comprehensive manner with other aspects of medicine, especially physiology and anatomy. In Rome he gave lectures on the latter subject accompanied by vivisections, and he compiled the pharmacological knowledge of his predecessors and contemporaries. In this

achievement he can be compared only to Dioscorides, who lived a century previous and whose book preserved by chance contains the essential elements of *materia medica*. Almost all the Alexandrian literature, even the works of Herophilus and Erasistratus, vanished in the course of five hundred years; concerning this period there can be made only cautious inferences based on the extant polemical writings of Galen, who sought to revive the fundamental principles of Hippocratic doctrine. Galen's most important works are those on practical medicine, which he wrote in the last decades of his life.

During Galen's lifetime Christianity began to exercise an influence upon medicine. Its emphasis upon sympathy with sufferers and upon Christian charity was exemplified in Basilias, a special city for the sick established at Caesarea by Basil the Great. Here patients were nursed and given medical assistance; arrangements were made for the transportation of the sick, and special houses were built for the care of outcast lepers. These represent the oldest hospitals devoted especially to the care of the sick; accounts of hospitals said to have existed in India in pre-Christian times or in the first centuries of the Christian era have not been verified. The emperor Julian, who was an Aesculapian adherent, expressly turned the attention of the pagan priests to the achievements of the Christian hospitals as an example worthy of imitation. Later the Aesculapian temples were transformed into the Christian hospitals of SS. Cosmas-Damian or SS. Cyrus-John. In the east Christian hospitals continued to dispense charitable aid to the indigent. They gradually developed into well equipped clinics and hospitals with well organized medical service and separate wards, as illustrated in the hospital regulations and service assignments in force at the Pantokrator monastery in Byzantium during the first half of the twelfth century.

Little is known about Moslem hospitals, which followed the Byzantine model. As early as the eighth century first aid stations and clinics dispensed services at the great mosque in Cairo on days on which religious services were held. During the twelfth century the Nuric hospital was founded in Damascus and at the end of the thirteenth century the al-Manşūr hospitals were constructed at Cairo. The Moslems came into direct contact with the Alexandrian schools of the Eastern Empire; in the schools of Syria and of the Sassanides they studied the Greek medicine of the Hellenic period as it was developed

after the death of Galen by the encyclopaedists Oribasius, Alexander of Tralles, Aëtius and Paulus Aegineta. The writings of the Greek physicians were translated first into Syriac and then into Arabic. The growth of medical knowledge in the Moslem world, especially in Bagdad, was aided by the contributions of several Persians, among whom were Ar Rāzi, the clinician who was the first to give an account of smallpox and measles; 'Alī ibn-al-'Abbās, who composed a summary of Greek learning; and ibn-Sīna (Avicenna), who wrote a similar but far more penetrating summary. In Andalusia another Moslem physician, Abu al-Qāsim, made an important contribution with his work on Greek surgery, the most comprehensive treatment of the subject which had yet appeared. His countrymen ibn-Zuhr (Avenzoar) and ibn-Rushd (Averroes) summed up their knowledge in instructive compendia. Continuing the philosophy of Aristotle and ibn-Sīna, ibn-Rushd revolutionized the thought of his time; his influence was stronger in the west than in the east or among his countrymen, who persecuted him and rejected his teachings.

Conditions for the development of medicine were much less favorable in the west, where both the Greek cultural tradition, which had inspired the schools of Alexandria, Edessa, Nisibis, Gōndishapur and Damascus, and the libraries of the eastern schools were lacking. Greek culture continued to yield modest fruits in the outposts of the Western Empire—in Numidia, Carthage, Gaul, Spain, Ireland and under the Visigoths and Vandals—but these were largely destroyed by the invasions of the Saracens, who furthered scientific development among the subject peoples only after the eclipse of their power. The Western Empire, with the exception of a narrow strip on the coast of southern Italy, gradually lost all knowledge of the Greek language, which was necessary only for purposes of trade with the Levant. Cassiodorus, the Syrian chancellor of the Ostrogoth Theodoric, realized the danger which the loss of culture involved for the west; when his idea of founding a university in Rome did not meet with favor, he established a small semimonastic community of scholars, who collected and copied Greek manuscripts including medical works and translated them into Latin. After his death the manuscripts were transferred to Bobbio in the north of Italy, where they passed into the hands of other cultural missionaries from Ireland. The scientific spirit later spread to Eng-

land, France, western Germany and the north of Italy, resulting in the so-called Carolingian renaissance, which aimed to preserve classic antiquity through copying Latin literature. Alchwine, Columba and Gallus among the missionaries established monastic centers of learning at various sites and collected and compiled many Latin texts. Most of the works were anonymous, as is characteristic of dark transitional periods which tend to relapse into primitivism; names were later ascribed in a haphazard manner. The meager literature preserved directly from antiquity is not of high standard.

In southern Spain the few hospitals which had been created by Greeks after the eastern pattern were exceptions. In Rome and its harbor city the hospitals were mere hospices for Christian service, in which the matron founders did the nursing. There was no question of employing physicians in these places; people at that time were concerned only with their own salvation, which they hoped to attain by performing Christian services and menial duties. Conditions were similar in the provincial cities, in the *hôtels-Dieu* of Paris and London, in the hospitals throughout England and in western Germany and in the monastic hospitals of France; in most cases these institutions were nothing but almshouses. Monastery infirmaries became the models for hospitals; the monks serving in the infirmaries were equipped for their daily medical duties by a book of prescriptions and a book of descriptions of symptoms. A new monastic and priestly medicine thus arose. Some of the monks, for example, Heribrand of Chartres (c. 990), also utilized in a fragmentary way the valuable works of classic medical literature.

But medical practise was kept alive largely as a result of the desire for culture of the barbarian converts and through the knowledge transmitted by the Arabs. Benevento and Salerno became centers of a progressive movement in western medicine. Through the efforts of Constantine the African the west came in touch with early Moslem knowledge, especially the works of 'Alī ibn-al-'Abbās. A century later the Lombard Gerard and his school of translators transmitted to the western world the Moslem natural and medical scientific treasures hoarded in Toledo. Scholastic students endeavored to assimilate the Arabized knowledge of Hellenism, until the Renaissance discovered the direct road to Greek medicine. Meanwhile surgery in Italy and later in France was developed by practise, and finally the brilliant Flemish physician Vesa-

lius destroyed the authority of Galen by his independent human dissections.

The work done by Vesalius in anatomy was paralleled in internal medicine, although with less success, by Paracelsus (Theophrastus von Hohenheim); rejecting the methods of Galen and ibn-Sina, which had degenerated into routine and dead formulae, and inspired by Hippocrates he sought in practise and research concrete knowledge, which he utilized for healing and for the preparation of drugs. Paracelsus recognized the dangers entailed in the melting and preparation of mercury, lead and other metals and accordingly gave an account of occupational diseases which prepared the foundation for modern social hygiene. Two hundred years later occupational hygiene was considerably advanced by Ramazzini at Modena. The basis of another important aspect of public hygiene was furnished by Fracastoro, a contemporary of Paracelsus, who stated the doctrine of infection and contagious diseases in 1546 in a treatise written in an almost modern spirit. Fracastoro's postulation of the existence of microorganisms in infectious diseases was later established by Koch and others.

The age of Paracelsus, Vesalius and Fracastoro also witnessed a decisive transformation in the hospital system of the west. The establishment of leper hospitals led to the development of segregated houses for special diseases; this system later suggested to physicians a method of dealing with contagious diseases. Syphilis, which attracted general attention shortly before 1500, also played an important role in the development of hospitals when the mercury treatment, successfully dispensed since the twelfth century, was adopted by city hospitals. People thus began to realize that chronic diseases could be cured, and hospitals developed from mere nursing houses into curing places under the direction of physicians and surgeons. Segregated houses were established during epidemics and for chronic and frequently recurring contagious diseases. The quarantine system, introduced during the fourteenth century into the Italian harbor cities, was adapted to new needs and became a permanent practise.

The study of biology also gained vigor through the campaign launched by Paracelsus for the introduction of chemical and physical principles into medicine. Harvey's complete demonstration of the circulation of the blood in human and animal bodies was the signal for a general advance in the study of biology as well as of

pathology. Under the impetus given to pathology by Morgagni there began a movement which culminated in the experimental work of Bichat, who formulated the program and laid the foundations of modern medicine. New departures were made by clinicians like Sydenham, who took his starting point from Paracelsus; by Boerhaave; by Stahl; by Haller; and by the old Vienna school, especially its leading member, Auenbrugger, whose discovery of the use of immediate percussion of the chest in diagnosis was completely worked out in the nineteenth century by the Frenchmen Corvisart and Laënnec. The cell doctrines of Müller and Schwann served as a basis for Virchow's cellular pathology. The doctrine of *contagium animatum*, which found its crowning expression in the modern doctrine of pathogenic microorganisms, was for the first time clearly stated by Jacob Henle in 1840. Striking advances were represented by the attempts of Jenner in 1798 to combat smallpox through the harmless inoculation of cowpox and by Semmelweis' experiences in 1847-48 with the aetiology of puerperal fever. In 1860, while Pasteur was working on the problem of fermentation, Davaine published the results of his researches on anthrax, which were finally corroborated in 1876 by Koch, whose method was influenced by that of Henle. In 1878 Koch published his studies in the aetiology of wound infections; in 1882 he discovered the germ of tuberculosis and in 1883 that of Asiatic cholera. Neisser discovered the gonococcus in 1879, Hansen the germ of leprosy and Laveran that of malaria. The Koch and Pasteur schools gave rise to a rapid succession of brilliant discoveries—among them those of the germs of glanders and diphtheria by Löffler in 1884, of pneumonia by Fränkel, of tetanus by Rosenbach, of erysipelas by Fehleisen, of typhoid fever by Eberth, of influenza by Pfeiffer, of Weil's disease by Jaeger, of the plague by Kitasato and Yersin; the discovery of the syphilis protozoa, anticipated by Klebs, was made in 1905 by Schaudinn.

Excellent work was also done in the fight against epidemic diseases; the extermination of yellow fever in Panama and Cuba was largely due to Sternberg, Reed and Gorgas. Scientists from all parts of the world vied with one another in the war against tropical infectious diseases; the researches carried on in connection with sleeping sickness and the work done by Theobald Smith on Texas fever are striking examples.

The end of the nineteenth century and the beginning of the twentieth were characterized

by great activity in medicine. This period witnessed the emergence of serum treatments, of antibodies and antitoxins as a result of bacteriological studies, of treatment by X-rays and other forms of rays, including the treatment of rickets by light rays. In these fields American physicians took an active part as both collaborators and leaders, thus perpetuating a tradition that goes back to Morton and Jackson, who occupy an important place in the history of anaesthetics, and to Sims, whose work in the field of uterine surgery in the period before the discovery of antiseptics ranks with that of the Scotchman Simpson and the Englishman Spencer Wells.

With the publication in 1867 of Lister's work on the antiseptic treatment of wounds a new chapter was begun in the history of medicine; Lister's method was subsequently refined and unessential elements were eliminated—asepsis replaced antiseptics—but his work opened the way to the surgical accomplishments of the last sixty-five years.

Recent progress in the field of medicine has been prodigious. Numerous methods have been developed for the prevention of pain, such as the morphine-scopolamine combination; local and spinal anaesthesia have been used since 1901. Among the most striking achievements are Sauerbruch's thorax surgery in pneumatic chambers, Cushing's brain and pituitary surgery, which was a pioneer contribution to physiology, and the various accomplishments of Halsted. Two Germans, Graefe and Helmholtz, laid the foundations of modern ophthalmology. The discovery of the salvarsan treatment by Ehrlich and Hata in 1910 made syphilis a much less dreaded disease. The World War gave rise to the method of combating spotted fever through delousing, the tetanus antitoxin injection for lockjaw, the antitoxin for gas gangrene, the typhoid injection and the Carrel-Dakin device for treating infected wounds. Among other important recent achievements have been the Wassermann test for syphilis in 1906, the development of the doctrine of vitamins in food by Gowland Hopkins in the same year, the Pirquet test for tuberculosis in 1907, the recommendation of a liver diet for anaemia first suggested in the United States and the discovery of insulin by Banting and Best in 1921.

Epidemics and contagious diseases are now largely under control, especially in the west—an achievement facilitated by advances in sanitation, the development of hygienic water sup-

plies, drainage and sewerage systems and food control, supervised by well organized health departments. Infant mortality has declined; the diseases of childhood are on the wane. But medical scientists are still faced by vast problems. Of special importance are those relating to the diseases of middle and old age, among them the discovery of the aetiology and cure of cancer. The science of medicine is just beginning to extend its horizons to include the important field of inquiry into the interrelation between physical and psychological disorders.

KARL SUDHOFF

MEDICAL EDUCATION in any country is affected by the whole educational system of which it is a part, by the history of its development, by the conditions under which the practise of medicine is carried on and by the broader social milieu in which it is placed. As medicine in its beginnings was tied up with religious rites, medical and religious education were not distinct. Specialized secular education for the practise of medicine appeared, however, at an early date; it was firmly established in the Greek medical schools in the age of Pericles, and it was found also among the Arabs. After the fall of Rome medical learning in Europe was kept alive in the monasteries and for a long period it was united with clerical education. The trend toward secular education was evident in the teaching of medicine at Salerno in the eleventh century and later in the medical curricula of the mediaeval universities.

Medical education through apprenticeship, by which an individual medicine man or physician passed on his knowledge to his successor, preceded the organization of the specialized medical schools and continued long after such schools were established. The education offered by the schools has varied relations to that given during apprenticeship. In France, for example, the medical schools were for many years designed for a supposedly superior group, while the great majority of practitioners, barber surgeons and apothecaries learned their trade as apprentices. In the United States, on the other hand, the earliest schools were frankly intended to supplement the training which the students received at the hands of individual preceptors. Gradually medical schools became the sole agencies through which medical education was carried on.

Medical schools may be classified broadly into three types: university schools, hospital

schools and proprietary, or profit making, enterprises. The largest number are connected with universities and the trend is clearly in that direction; but in the United States and in most western European countries outside of Germany medical schools are still somewhat isolated intellectually and often physically from other university departments.

Governments exert more or less rigorous control over the content and standards of medical education. In Germany the control is direct, in England and the United States it is exercised through the governments' power to prescribe qualifications for those entering practise. In the United States, unlike European countries, the control is not in the hands of the central government but is left to the states. Some measure of uniformity in state standards, however, is brought about by the influence of such voluntary agencies as the Council on Medical Education of the American Medical Association, the Association of American Medical Colleges and the Federation of State Medical Boards. A peculiar feature of government control in the United States has been the tendency to write into the law specific requirements concerning the medical education of those licensed to practise; these requirements, which were the accepted standards when they were adopted, have remained on the statute books long after the best thinking on the subject has questioned their validity.

Medical education is now specialized professionally and presupposes relatively high standards of general education. In the United States the formal requirement is usually two years of college study including certain prescribed work in the natural sciences, but actually well over half the students complete a four-year college course before entering medical schools. This is in the tradition of the mediaeval university, where knowledge of Latin was essential for understanding the lectures and where the medical course was supposed to follow the arts course. It is, however, distinctly opposed to the tradition of the apprenticeship system; and since some schools developed as extensions of that system, the high standards of preliminary education have not been universally maintained. In the United States, where the demand for physicians grew faster than secondary and college education and where proprietary schools set the pace, many medical schools as late as 1910 admitted students who had not had a high school education and who were not eligible for entrance to liberal arts colleges. In every country

the requirements prescribed for premedical education have been shaped by tradition quite as much as by careful consideration of the objects to be achieved. In Germany, for example, they bear the influences of a class society and the desire to keep physicians in the company of gentlemen. In the United States the emphasis has been primarily on a study of the natural sciences, apparently more from a belief in the necessity of a knowledge of their subject matter than from a consideration of their value in cultivating intellectual habits. Recently the desirability of such early specialization has been questioned and consideration has been given to the possibility of reformulating the requirements so as to encourage general education, and to emphasize intellectual qualities and promise rather than the possession of specific knowledge.

Modern medical education is designed to provide a basic course for both practitioners of medicine and research workers in the field. The mediaeval university on the other hand was interested chiefly in the scholar, the hospital school in the practitioner. The objectives of medical education today are usually stated so as to emphasize helping the student to observe, to reason upon the basis of his observations and to use the findings of others in the interpretation of results. Thus the trend in educational theory toward an emphasis on the development of abilities rather than the acquisition of knowledge is reflected in the medical schools. But neither medical schools nor other educational institutions have a satisfactory solution of the problem of the relation of knowledge to the development of ability.

The typical course in modern medical schools comprises a study of physical sciences, biological sciences including bacteriology, anatomy and pathology, pharmacology, hygiene, medicine, surgery, obstetrics and other specialties. In anatomy the student dissects, in bacteriology he does laboratory work, in clinical medicine he works in the hospital, taking case histories, giving tests, examining and eventually treating patients under the guidance of experienced physicians. He is thus supposed to acquire some of the technical skill he will need in the practise of medicine, and also to obtain a more thorough understanding of the subjects which he is studying. Practise work and study from books are as a rule carried on simultaneously. In some countries, however, although the student sees patients while he studies disease, his own work

with them is postponed until he has completed his formal courses; in most countries he goes through a period of internship in a hospital, during which he confines himself to this work, following no other program of study. The influence of the mediaeval university on the development of this course is apparent. Its traditional division of the field into theoretical and practical medicine has never quite been lost; its use of the lecture has influenced methods of instruction throughout the history of education; its construction of a course dealing with all relevant knowledge has influenced all subsequent course making.

The establishment of a chair of anatomy during the Renaissance period was the earliest of the important innovations in medical curricula. The introduction of bedside instruction in the hospitals by Boerhaave in Leyden in the eighteenth century was significant, although isolated instances of this practise had occurred at a much earlier date and although it did not become general until later. The most revolutionary changes came with the scientific developments of the nineteenth century. The introduction of laboratory instruction in the German medical schools in the first quarter of the century was the symbol of a change which affected the whole of medical education, shifting its emphasis from a study of conclusions to a study of processes and its center of interest from treatment to causes. Not until the twentieth century, however, did the typical medical course conform to its present pattern. Laboratory facilities, previously found only in the exceptional schools, became general. Hospitals were brought into closer relations with the schools, giving the latter an opportunity to make the practise work of the students serve educational ends and not merely the convenience of the hospitals. The revolt against the lecture system made headway, and greater use was made of something similar to a case method of instruction.

The lead in medical education has been taken now by one country, now by another, and adherents of Veblen's theory of the advantages of cultural borrowing would find much to support it in the history of medical education. In mediaeval times the best known medical schools flourished in Italy, followed later by the medical schools at Montpellier and Paris. In the seventeenth and eighteenth centuries the outstanding schools, noted chiefly for their clinical work, were in Edinburgh, London, Leyden, Paris and Vienna. German medical education was back-

ward until toward the middle of the nineteenth century, when it moved rapidly to the fore and furnished the model for all other lands. In 1910 Flexner's reports on medical education revealed the fact that in spite of the presence of a few excellent schools the standard of medical education in the United States was incredibly low. The influence of these reports and the subsequent gifts of the foundations were powerful factors in effecting improvements. Medical schools in the United States now rank with those of other countries; they are probably on the whole better equipped than foreign schools and are beginning to attract advanced students from abroad.

Many criticisms are made of modern medical education. The curriculum is admittedly too crowded for effective results. The student is forced to cover so much ground that in many subjects he can acquire only partial knowledge, which may well be more dangerous than ignorance. The instructor, because he must present a large subject in a short time, tends to be dogmatic even when he knows that the students need to see the accepted truths as working hypotheses. This criticism has been made for at least half a century, but in addition to the difficulty of reducing the study of subjects which have won an established place in the curriculum, the expansion of knowledge in the medical field has been so great as to produce pressure not only for the introduction of new subjects but also for the devotion of more time to the old. As a result the student has all too little time for thinking about what he is doing.

The stress on the work in the basic sciences about which there was such enthusiasm at the turn of the century is now being questioned. Laboratory instruction is recognized as essential to an understanding of modern science, but it is contended that the laboratory courses given are adapted to the needs of technicians rather than to the requirements of students of medicine. Furthermore the basic science courses appear to many to be insufficiently coordinated with the clinical courses. In most schools the curriculum is constructed on the principle that for an understanding of disease a preliminary knowledge of the basic sciences is essential: thus the course is divided sharply in point of time into two parts, with the division emphasized in many ways. But exclusive attention to laboratory methods for a period of two years tends to make the study of clinical medicine difficult. For the sphere of laboratory science is one of

uniformities, of quantitative exactness, of conditions subject to an almost perfect control, while that of clinical medicine is one in which no two cases are just alike, in which the materials to be manipulated are human beings, who may perhaps be controlled, but not by the techniques of the laboratory.

The shift in emphasis to the study of the causes of diseases which followed the discoveries of Virchow and Pasteur is also regarded by some as having gone too far. The importance of this study and of correct diagnosis is admitted by all; but knowledge of causation has advanced far more rapidly than knowledge of treatment, and it is suggested that the medical student should receive more stimulus to study methods of treatment and to work out ways by which they may be improved. Moreover it is questioned whether sufficient encouragement is given to the student to think in terms of the patient and not the disease, which is the avowed ideal of medical practise. The general practitioner is conspicuously absent from the medical faculty and as a result the student comes in contact with patients only through specialists, and is supposed to build up his picture of the whole by adding specialized picture to specialized picture. But the question is even broader than this. To think in terms of the patient rather than of the disease implies an understanding of the whole patient and of the patient as a member of society. The medical course, however, is limited primarily to the physical and biological sciences. The student is not usually led to consider the bearing of psychological or emotional factors on physical reactions or the possible effects of social and economic factors in the world in which the patient lives. Psychiatry has recently been placed on the curricula of some medical schools, but it is still regarded as a specialty to be kept in its own compartment. The importance of social and economic factors in affecting the patient's health is practically ignored. Medical education is being criticized also on the ground that it is concerned more with the study of disease in relatively late stages than with the study of preventive medicine.

In the United States attention is being directed to the problem of finding a way by which instructors in clinical medicine may have both adequate time for their work with students and sufficient contact with sick patients to keep them good clinicians. Traditionally in most countries the clinical instructor has been a

practising physician, earning part of his income from treatment of patients, part from his services as instructor. Under such circumstances the demands of private practise have often distracted attention from teaching. More recently there has been a movement to put at least some of the clinical instructors on a full time salary basis at the medical schools and at the hospitals connected with them. This would remove the economic pressure which has caused them to slight the work of instruction, but the question remains as to the amount of practise needed to make a physician the best possible clinical teacher.

A more fundamental criticism is that medical education has not solved the problem of keeping pace with a changing world. It is still weighed down by the authoritarianism of the mediaeval university, and it is still better adapted to teaching the truths of today than to developing the ability to appraise new discoveries. This criticism might be made with equal force of all modern education, for nowhere has it solved the problem of fitting students for a world in which change is normal. But the failure to solve this problem is probably attended with more obvious consequences in medical education than elsewhere.

HELEN R. WRIGHT

ECONOMIC ORGANIZATION. The provision of medical care ranks as a major industry. In the United States the capital investment in hospitals

alone, about \$3,500,000,000 in 1928, was exceeded only by the capital investment in the iron and steel, textile, chemical and food products industries. The estimated annual expenditure on all types of medical service totaled approximately \$3,500,000,000 in 1929, roughly equivalent to the total national expenditure on education, both public and private. Table I shows the distribution of this expenditure among the various types of service and the sources from which the funds were drawn as disclosed by the extensive studies of the Committee on the Costs of Medical Care—representing all interests involved in the provision of medical services—after its researches into the economic aspects of the prevention and care of sickness, including the adequacy, availability and compensation of the persons and of the agencies which are concerned.

Of the 1,100,000 persons directly employed in 1929 in the provision of medical services in the United States—as many as are engaged in the extractive industries—the largest single group is employed in hospitals: the hospital personnel is estimated to be 550,000, in addition to which there are 2600 hospital superintendents. Next in numerical importance are the 200,000 graduate nurses, the 150,000 practical nurses and the 142,000 physicians with their 24,000 attendants. There are 132,000 pharmacists and 84,000 drug clerks and assistant registered pharmacists, over 67,000 dentists, 1800 dental hygienists, 12,000 dentists' assistants and

TABLE I
EXPENDITURES FOR MEDICAL CARE IN THE UNITED STATES, 1929
(In thousands of dollars)

SERVICE	TOTAL EXPENDITURES	SOURCES OF FUNDS			
		PATIENTS	GOVERNMENTS	PHILANTHROPY	INDUSTRY
Physicians in private practise	1,090,000	1,040,000	—	—	50,000
Dentists in private practise	445,000	445,000	—	—	—
Secondary and sectarian practitioners	193,000	193,000	—	—	—
Graduate nurses, private duty	142,000	142,000	—	—	—
Practical nurses, private duty	60,000	60,000	—	—	—
Hospitals: operating expenses	656,000	278,000	300,000	54,000	24,000
new construction	200,000	—	100,000	100,000	—
Public health	121,000	—	93,500	27,500	—
Private laboratories*	3,000	3,000	—	—	—
Orthopaedic and other supplies*	2,000	2,000	—	—	—
Glasses*	50,000	50,000	—	—	—
Drugs*	665,000	665,000	—	—	—
Organized medical services*	29,000	7,790	16,000	210	5,000
Total	3,656,000	2,885,790	509,500	181,710	79,000

* Not included in other items.

Source: Committee on the Costs of Medical Care, *Medical Care for the American People: Final Report*, Publication, no. 28 (Chicago 1932) p. 14.

10,000 dental technicians. Irregular practitioners, including osteopaths, naturopaths, chiropractors and Christian Science practitioners, total another 36,150 and there are 47,000 midwives. Nearly 30,000 persons practise limited or subsidiary branches of the healing art as physiotherapists, electrotherapists, masseurs, optometrists and chiropodists. There are also 5000 clinic attendants, 1400 persons employed in private clinical laboratories, 11,500 persons other than those already mentioned working in health departments and 1000 persons working for private health organizations. In addition to those directly employed in the provision of medical care, there are nearly 100,000 engaged in supplying goods and services essential to the conduct of the medical industry. According to the 1927 United States Census of Manufactures, over 86,000 persons were employed in the following affiliated industries: dental goods; drug grinding and druggists' preparations; professional and scientific instruments; optical goods; patent medicines and compounds; surgical appliances.

It is estimated that there were in the United States in 1927, 127 physicians per 100,000 population, their distribution ranging from 71 per 100,000 in Montana and South Carolina to 200 in California. Comparable figures for European countries are: Austria, 114; Great Britain, 111; Switzerland, 80; Denmark, 70; Germany, 64; France, 59; Norway, 57; Belgium, 54; Sweden, 35.

In the United States medical personnel and facilities are distributed not according to the needs of the people, which are presumably quite similar throughout the country, but according to their ability to pay for medical care. Medical practitioners tend to concentrate in the larger centers of population, where competition is keener but where the chances of remunerative employment are nevertheless greater. Thus 44 percent of the physicians in the United States practise in communities of 100,000 population and over; that they are economically justified in so doing is shown by the fact that they earn 54 percent of the total earnings of all physicians. In rural areas and small towns with a population of less than 5000, which contain almost 50 percent of the total population of the country, only 30 percent of all physicians are located; their earnings total 18 percent of all physicians' earnings. Even in Mississippi, where the supply of medical facilities appears quite inadequate to meet the real need for service, the occupancy of beds in general hospitals was only 49 percent,

indicating that the supply exceeds the effective demand at current prices.

Only a very small minority of the vast and heterogeneous body of consumers, scattered over more than three million square miles of territory, are in a position to exercise a wise and well informed choice in their demand for medical services. The majority are extremely credulous and are far from possessing the critical attitude toward cures and nostrums which would result from an appreciation of the real nature and functions of modern medicine. Superstitious healing practises and semimagical cures are widely used. The general ignorance of the value of scientific medicine, debarred from advertising the services it offers by the rules of professional ethics, gives a strong competitive advantage to inferior substitutes. Quacks and irregular practitioners of all kinds have no hesitation in offering a certain cure for a fee specified in advance, whereas the patient is often intimidated by the professional reticence of the qualified physician and is hesitant because of the uncertainty as to his fee. In 1929 the people of the United States spent no less than \$360,000,000 on patent medicines of dubious value; another \$165,000,000 was spent on "home remedies," which also are deplorable from a medical standpoint; \$3,000,000 was paid to midwives, most of whom were unqualified; \$42,000,000 to osteopaths, \$63,000,000 to chiropractors, \$10,000,000 to naturopaths and \$10,000,000 to Christian Science practitioners and other religious healers.

While the demand for medical care is subject to the usual limitations imposed by considerations of price and tends to contract when prices rise or purchasing power declines, it is differentiated from the demand for other common articles of consumption in that a visit to the doctor is regarded in most instances as an unpleasant necessity, undertaken only in order to obtain relief from pain or sickness. Emergency medical care, in case of accident or serious illness, is a necessity more urgent even than food or shelter, and the demand for this type of attention is necessarily inelastic; it will ordinarily be exercised regardless of the financial sacrifice involved. Although the number of cases of serious illness or accident likely to occur within a given period among a large population group can be foretold with reasonable certainty, no individual within the group can predict his own medical needs. Thus a serious unforeseen illness is likely to strike a family as a financial calamity, aggravated as it is by the simultaneous curtail-

ment of the family income if the sick person is a wage earner. The burden of the costs of illness is very unevenly distributed, as is shown by the study of family expenditures published by the Committee on the Costs of Medical Care. Of 2100 families living in cities of between 5000 and 100,000 population which furnished data on medical expenditures for an entire year, the general average expenditure was \$30 per capita. This average, however, conceals a wide range of individual expenditures: among the families with annual incomes of under \$1200, 79 percent were charged less than \$60 during the year; their bills amounted to 35 percent of the total costs for this income group. At the other extreme, .4 percent of these low income families were charged \$500 or over, or 7.3 percent of the total costs of the group. The same uneven type of distribution of medical costs prevailed among all the groups studied by the committee, regardless of income or location.

While the need for emergency medical care takes precedence over all other calls on the consumer's income, there is considerable elasticity in the demand for less urgently needed types of medical service. People suffering from mild or chronic ailments who can get along without immediate attention will do so if the price is more than they are able or willing to pay; or, if inferior types of service are offered on more attractive terms, they may prefer to buy such substitutes for scientific medical care. The persistence of untreated diseases and defects and the enormous toll of preventable deaths indicate a further potential demand which is not made effective under the present system of producing and consuming medical services.

Surveys have shown that at any given time about 2 percent of the population in the United States is incapacitated by sickness, involving a loss of wages for the incapacitated individuals, a reduction in the productive efficiency of industry and an increase in the total cost of education due to absences of children from school. An estimate by the Committee on the Costs of Medical Care places these economic losses due to sickness at no less than \$250,000,000 annually. In view of the fact that a large proportion of this illness is preventable by the application of known and tried medical methods, the economic argument for a larger expenditure for preventive medicine is compelling. The economic losses resulting from preventable illness are furthermore exceeded by the losses from premature deaths. Dublin, basing his calculation

on the costs of rearing a child and on future earning power, has estimated that the total capital value of the lives which can be saved annually through the application of preventive medicine is approximately \$3,500,000,000. In an attempt to gauge the extent to which the need for medical care is being met under the present system of producing and paying for medical services, the Committee on the Costs of Medical Care drew up standards of adequate care, based upon the present incidence of diseases and defects and the present capacities of medicine to deal with them. The estimated amount and kind of service required was compared with the actual services consumed by the 9000 families studied. At every income level the amount of care received fell short of the standards of adequate care formulated by the committee, the greatest inadequacy being in preventive services. There was a notable increase in the discrepancy between care received and estimated need as family income declined.

The present inadequate use of the resources of modern scientific medicine for the promotion and preservation of health suggests that the difficulty lies in the nature of the economic arrangements by means of which the producers and consumers of medical services are brought together. Medical technology has advanced so rapidly as to revolutionize the nature and functions of medical practise. The need for medicine has expanded with changing social ideals and with the changing capacities of medicine. Anaesthesia and asepsis, by making surgery safer, have raised it to the category of necessities of life for many persons; similarly, the discoveries in the field of pathogenic microorganisms have established the control of communicable diseases as one of the elements in a civilized standard of living. Moreover the economic organization of society has undergone a radical transformation. The typical physician no longer serves a stable agricultural community, but must fit himself into an urbanized world of rapid communication and large scale, standardized production.

Medical institutions have not been adapted and coordinated to suit these changing conditions and medical services remain at present largely unplanned and individualistic. The private practitioner is still typical, and his ideology remains dominant. Of the 143,000 physicians engaged in professional activity in the United States, 121,000 are in private practise, 1000 are members of private group clinics and 21,000 are employed on a full time salary basis. The private

practitioner occupies an anomalous position, being at the same time part of a vast technical organization and a small independent business unit. His former self-sufficiency has been destroyed by technical advances; whereas he used to carry most of his stock of medical information in his head and the tools of his trade in his saddlebag, he now needs the cooperation of specialists and depends upon hospital facilities and expensive equipment for the practise of his science. His necessary professional relations with the various medical agents with whom he must cooperate have no customary economic machinery to facilitate them; out of this situation arise such professionally deplorable practises as fee splitting.

The growth of specialization is one of the conspicuous features of modern medical practise. According to a study made in 1930, 23 percent of approximately 5000 American physicians in private practise were complete specialists, 21 percent were partial specialists and the remaining 56 percent were general practitioners. The reasons for specialization are partly technical, partly economic. Specialization enhances the value of the physician's services and so enables him to command a higher income. The average net income of physicians whose competence was completely specialized was \$10,000 in 1929, while that of the general practitioners was only \$3900. The general economic law that specialization is limited by the extent of the market holds true in medicine: in small towns of less than 5000 population 86 percent of the doctors are in general practise, whereas in cities of 50,000 population or over more than 60 percent of all physicians specialize in part or altogether. From the point of view of good medical care the technical advantages of special skills are to a great extent offset by the economic difficulties which hinder coordination of the work of specialists. The patient is in no position to determine the type of specialist service he requires but resents the necessity of paying the general practitioner to find him a specialist, in addition to the fees he must pay the specialist himself. The patient often seeks to avoid this double expense by going directly to a specialist, whereas his needs are generally better served by a general practitioner who is familiar with his medical history and who works in consultation with specialists as they are needed.

Although the costs of medical services have increased rather than diminished with the advance of medical knowledge and cannot be re-

duced by any system of mass production, the private practitioner is an unnecessarily wasteful economic unit. Individual offices involve considerable duplication of expensive equipment, much of which is only infrequently used. The average investment of sample groups of practitioners studied by the Committee on the Costs of Medical Care ranges from \$1860 to \$3310 for physicians and from \$1698 to \$5927 for dentists. The average ratio of running expenses to total gross income was found to be 40 percent for both physicians and dentists. The cost of medical education to the student or his family is variously estimated at from about \$4500 to \$10,000, while additional expenses are borne by the medical schools and thus ultimately by the public. The physician's time is not used fully in the practise of his skill; the private practitioner often devotes some part of his time to clerical work. Under the system of private practise moreover the young physician, in spite of efforts to make himself known by serving as lodge doctor or by giving free service in order to build up a hospital connection, is often employed only for about half his time during the first five years after his graduation from medical school. The hours of the private practitioner are long and irregular, and unless he works in partnership with other doctors his income ceases when he takes a holiday. The incomes to be earned are not high, and they are moreover precarious. The average net income of physicians in 1929 in the United States was \$5300; but 33½ percent of all practising physicians had a net income of less than \$2500, and 15 percent earned less than \$1500. The median net income was \$3800. In 1930, however, physicians' net incomes had decreased by approximately 10 percent in the middle Atlantic states, 19 percent in the New England and Pacific states and 50 percent in Oklahoma, Texas, Arkansas and Louisiana.

The fee system of charges commonly practised is often incompatible with the requirements of good care especially in cases of chronic illness, because patients are apt to cease paying for visits as soon as the worst symptoms have been alleviated. The custom of applying a sliding scale of charges works out to the detriment of both the public and the profession. The public suffers from the uncertainty as to price, and the treatment of the indigent sick is paid for, not by taxation proportionate to capacity to pay levied on all members of the community, but by those solvent members of the community

who fall sick. The doctor exercises a taxation function for which he is ill equipped, and his judgments as to the economic position of his patients are often erroneous. Moreover the sliding scale encourages consumers to demand the services of a physician whose high charges, made possible by a great reputation, would normally put him outside their reach; while young and perhaps equally competent physicians suffer from underemployment. At the same time the tradition of free service which is used as an argument in justifying the use of the sliding scale imposes an unequal burden on the members of the medical profession; the anticipation of free service on the part of many patients contributes to the fact that the proportion of bad debts is higher in medicine than in the sale of other articles of consumption. It was found that the heaviest burden of bad debts fell in 1929 on the least affluent members of the medical profession in the United States: physicians with an income of under \$1000 collected only 51 percent of their total charges, whereas those with an income of between \$5000 and \$10,000 collected 80 percent.

Private practitioners work as competing units, but it is a competition shorn of most of its usual methods. Competing physicians can do nothing to attract business and the purchaser is debarred from comparing values by the fact that the service is highly skilled and adapted to the needs of a particular patient; there is thus no open market in which competition can become effective. In spite of its evident disadvantages, both as a method of producing good medical care and as a means of earning a living, the typical physician clings to his competitive economic status with conviction fortified by the rules of professional ethics as formulated by the American Medical Association. Although most of these rules are ethical in the best sense, embodying the ideals of a profession devoted to public service, some precepts are designed to regulate and insure the continuance of free and fair competition. Thus contract practise is held to be unethical "when there is interference with reasonable competition" among the physicians of a community. The opposition of certain organized sections of the medical profession to all forms of medical service, however desirable from the point of view of the public, which threaten in any way the business of the private practitioner often emphasizes the un-Hippocratic, craft aspects of medical ethics. It is this sentiment which appears to have influenced the

rejection, by the members of the organized medical profession on the Committee on the Costs of Medical Care, of the committee's majority final report recommending a unified organization of all types of medical care in each community grouped around a health center, and some method of group payment on a regular annual basis for complete medical care. The conservative argument against all forms of economic organization in medicine other than private practise stresses the value of individual initiative in keeping up the standards of the medical profession. In the face of a situation in which the economic interests of the practitioner are often at variance with his professional interest in doing his work well, the social value of the purely economic incentive supposedly offered by private practise is dubious. The charge that the quality of work suffers when the physician is paid a salary instead of collecting so much for a visit on the usual piecework basis of private practise is not borne out by the experience of organized medical services.

Private practise has left the rural areas inadequately provided for and is likely to be supplanted in these sections by some system comparable to that adopted with success in Saskatchewan, where more than thirty rural communities employ one or more physicians on a salary basis to provide medical services to the residents. The expanding activities of public health services threaten the survival of private practise from another quarter. In the past the functions of the two agencies have been fairly clearly distinguished, public health being concerned mainly with prevention and private practise with diagnosis and treatment; but no such clear division of functions now exists. The success of public health measures in reducing the incidence of communicable diseases has emphasized the importance of the serious chronic diseases of middle life, the prevention of which through the periodic health examination lies within the province of the physician. On the other hand, public health departments now provide individual treatment for certain chronic diseases correlated with indigence because of the long duration of disability or the expense of treatment; for example, tuberculosis, mental diseases and venereal diseases. The lack of economic ties between the private practitioners of medicine and the public health departments hampers to some extent the cooperation necessary to the adequate performance of their several functions and gives rise to friction. Members of

medical societies are enjoined by the American Medical Association to combat any activity which comes within its definition of "state medicine," which excludes all public health activities that are not approved by the county medical society.

A formidable competitor to private practise has appeared in the private group clinic. There are now in the United States approximately 200 such clinics, most of which have been organized since the World War. A number of physicians, among whom the main specialties are usually represented, sell their services as a group, pool their income, share buildings and equipment and employ a business manager and clerical staff to run the administrative side of their joint practise. Many clinics sell complete medical service, including preventive care, for a fixed monthly or annual fee. The advantages of this form of organization over individual private practise are many. The patient, instead of going from specialist to specialist, with each consultation involving a separate financial transaction, receives all the attention he needs in one place for an inclusive charge. Under the periodic payment plan he knows in advance what his medical expenses for the year will be and is relieved of the fear of the sudden necessity of meeting a large medical bill made up of physicians' fees, nurses' fees and hospital charges. The physician is provided with adequate equipment without prohibitive cost to himself, his time is more fully and effectively utilized than in private practise, and he feels free to consult his colleagues without embarrassment and without involving his patient in additional expense. The costs of production are minimized through the full utilization of personnel and facilities, and research is made easier through the accumulation of a large number of records. The conservative elements in the medical profession oppose group clinics as "mass produced medicine" and declare that private initiative is destroyed and the patient less carefully served. Certain endowed clinics which accept paying patients are condemned also as unfair forms of competition; but since these organizations meet a public need which private practise seems ill adapted to supply, they will probably continue to receive financial support until some equally satisfactory substitute is found. Industrial health services and university health services encroach further upon the field of private practise, providing a comprehensive medical service for an inclusive and usually modest fee.

Government health insurance as a device for securing medical service for the lower income groups not adequately served by private practise does not exist in the United States; in all European countries, however, health insurance is an aspect of social insurance legislation. The national systems of health insurance in Europe, whether voluntary or compulsory, are administered largely through the sickness insurance societies or funds which were already functioning and which constituted an important vested interest when the legislation was introduced. Nearly all the voluntary societies now receive financial assistance from the state and from the employers; as the importance of the state contribution grows, the autonomous, fraternal character of the societies is weakened. Further developments tending to reduce the power of the societies are the increasing stress upon medical benefits, and the growing interest and influence of the medical professions, which had not participated actively in the formulation of the earlier legislation. All systems of health insurance pay cash benefits and provide some services; but the size of benefits, the range of medical services, the size and sources of contributions and the form of contract with the medical professions vary widely and are moreover in constant process of change within each country (see HEALTH INSURANCE). Twenty-five countries had compulsory systems and fifteen had voluntary systems in 1930; the tendency has been toward compulsory systems. All schemes include only persons below a specified income level. Contributions are generally drawn from the insured, the employer and the states, the employer acting as the collecting agent; only Rumania has charged the whole cost of insurance to the workers. The Swiss cantons divide the cost between the insured persons and the local treasuries which receive subsidies from the state; Portugal exacts contributions from all employed persons, regardless of income, but pays benefits only to the lower income groups. Except in Great Britain, the Irish Free State and some cantons of Switzerland, the contributions are graduated according to income; in these countries all the insured pay a flat rate. Payment to the practitioner for medical services is made either on a capitation basis or with separate fees for each service rendered, or more rarely a physician is employed on a salary basis. Relations between the medical professions and the insurance societies are best in countries where the remuneration of physicians is fixed or is con-

trolled by the physicians, as in England and Denmark.

In countries which have not made membership in a health insurance society compulsory for all below a certain income level the contributions of the state toward the expenditures of the existing voluntary societies are high. In Belgium 12.9 percent of the population is covered by health insurance, and the state contributes 39.2 percent of the total cost. In Sweden 15 percent of the population is included, and the state contributes 17.8 percent of the cost. In Switzerland 37.1 percent of the population is covered, and the state contribution is 31.3 percent. The Danish scheme includes 45 percent of the total population, which is a larger proportion than that of any country having compulsory insurance, and the state contribution is 50.3 percent of the whole cost. The voluntary character of the Danish scheme is largely illusory, participation being fostered by governmental pressure through disabilities imposed on persons who receive any form of relief.

The insurance of employed persons does not go far toward providing adequate medical care in the less industrially developed countries, as is shown by the figures for Bulgaria and Poland

TABLE II
STATISTICS OF INSURED PERSONS

COUNTRY	COMPULSORILY INSURED (PERCENTAGE OF EMPLOYED POPULATION)	TOTAL INSURED (PERCENTAGE OF TOTAL POPULATION)
Austria (1925)	75.00	34.30
Bulgaria (1925)	56.34	4.74
Czechoslovakia (1924)	65.54	19.25
Germany (1925)	76.80	32.00
Great Britain (1921)	86.40	35.20
Hungary (1924)	44.00	11.65
Norway (1920)	73.10	21.30
Poland (1926)	44.40	7.00

Source: International Labour Office, *Compulsory Sickness Insurance*, Studies and Reports, ser. M., no. 6 (Geneva 1927) p. 158-59.

in Table II. In Germany the insured population receives nearly complete medical care, including hospitalization and specialist services, and these services are extended to the families of the insured. The English scheme does not include the family of the insured, and only general practitioner services and medicines are universally provided, although certain societies give in addition ophthalmic and dental care. The total expenditure for sickness relief in Germany in 1929 was \$415,000,000, of which \$172,000,000 was for cash payments to the insured, \$98,000,000 for medical fees, \$19,000,000 for dentistry,

\$57,000,000 for drugs and appliances, \$65,000,000 for hospitalization and \$3,000,000 for other services. In England and Wales in 1930 the payments to 15,714 physicians for services to the insured totaled £7,196,670; 10,223 chemists' shops received a total of £2,335,270.

Public opinion in the countries which have adopted health insurance is almost unanimously in favor of its continuance. Cash benefits to compensate for loss of earnings during illness have remedied an important source of financial insecurity threatening the wage earner. Although the adequacy of the care received varies and generally leaves much to be desired, there is no doubt that wage earners are incomparably better served than they were before the adoption of insurance. The medical profession has gained economically through greater security and increased effective demand for its services. The average income of doctors from their insurance practise in England and Wales was £458 in 1930, an amount which is supplemented by the returns from private practise. A comparison of incomes of doctors in the German insurance system with those of the physicians in Detroit studied by the Committee on the Costs of Medical Care showed that when these are adjusted for the difference in cost and standard of living in the two countries, incomes were as high in Germany as in the United States.

The advances in medical science have introduced strains and incongruities in the field of health insurance as well as in private practise. As hospitalization increases in importance, the self-sufficiency of insurance schemes is reduced: their medical services must rely upon the use of expensive hospital facilities, which must also be used by public health authorities in the provision of medical care to the indigent and by physicians treating private patients. Marked confusion in economic organization results. In Denmark the state or local government provides hospitals, offering their facilities at less than the running cost to the insurance societies, which are already heavily subsidized by the state; hospital doctors receive a government salary and private practitioners lose their patients' fees when they send them into the hospitals. In England, where no hospitalization is provided in the insurance benefits, voluntary hospital insurance societies, comparable to the friendly societies which preceded the National Insurance Act, are growing in number. Meanwhile the voluntary hospitals supported by charitable contributions have become increasingly incapable of meeting

the growing demand for hospital care, and the government supported hospitals have steadily enlarged their capacity. The economic and medical disadvantages of private practise and individual payment affect the non-insured persons of moderate income no less in the countries which have a system of health insurance than in the United States. Although insurance would seem favorable to a more effective application of preventive medicine than is possible under the system of private practise, there has so far been little progress in this direction. Contrary to expectations, the amount of recorded sickness and the number of insurance claims have shown a steady increase. The augmented demand for service stimulated by the removal of financial deterrents, coupled with the increasing costs of medical care as technology advances, and the recent decline in contributions due to depressed economic conditions have resulted in a severe strain on insurance funds, especially in Germany. Both from the point of view of the adequate utilization of medical technology to promote and maintain public health and from the point of view of economic and administrative efficiency, it would seem desirable to make insurance responsible only for the financial provision against wage loss due to sickness and to provide medical services to the entire population under some unified and adequate scheme independent of the insurance against loss of wages.

The U.S.S.R. is as yet the only country which has recognized that the free provision of medical services to all the people is a responsibility of the state, on a par with the responsibility of government for education. Soviet medicine is being reorganized in accordance with the following principles: the unification of all health services; the accessibility of good medical care to all the people; complete free medical service for all; well trained personnel; and an emphasis on prevention. The dependence of rational medicine on an intelligent public is recognized, and an intensive medical educational program is under way. The ideal of free and adequate medical care for all the people is by no means realized as yet largely because of the shortage of trained physicians; who numbered approximately 84,000 in 1931. The problem of rural medicine remains acute, since only one fifth of the physicians are in rural communities; but the government is attempting to serve the remote rural areas by establishing health stations in agricultural collectives and by organizing traveling clinics. However far the present provision of

medical care to the Russian people falls short of the Soviet ideal, the U.S.S.R. has at least removed all institutional obstacles which stood in the way of an adequate utilization of the vast potentialities for human well being inherent in modern medical technology.

LEWIS WEBSTER JONES
BARBARA JONES

See: HOSPITALS AND SANATORIA; CLINICS AND DISPENSARIES; MORBIDITY; MORTALITY; PUBLIC HEALTH; COMMUNICABLE DISEASES, CONTROL OF; TROPICAL MEDICINE; MATERNITY WELFARE; BIRTH CONTROL; PROSTITUTION; INDUSTRIAL HYGIENE; MENTAL DISORDERS; PSYCHIATRY; PSYCHOANALYSIS; CHRISTIAN SCIENCE; WARFARE; RED CROSS; LIFE EXTENSION MOVEMENT; SANITATION; HEALTH EDUCATION; HEALTH CENTERS; HEALTH INSURANCE; MEDICAL JURISPRUDENCE; MEDICAL MATERIALS INDUSTRIES; PROFESSIONS; PROFESSIONAL ETHICS; DENTISTRY; NURSING; SOCIAL WORK; SPECIALIZATION; FEE SPLITTING; SCIENCE; RESEARCH; BIOLOGY; ALCHEMY; MAGIC.

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MEHEMET ALI (Mohammed 'Ali) (1769-1849), Egyptian ruler. As an uneducated Turkish soldier of Albanian descent Mehemet Ali entered the military campaign against Napoleon in Egypt in 1799. He was a shrewd politician and in 1805 rose to be pasha of Egypt; in 1811 he secured his position by massacring the Mameluke chiefs, whose line had ruled Egypt since 1250. Using the profits made in agricultural trade during the Napoleonic wars he expanded his army and navy, which he organized on European lines with a predominantly Egyptian personnel. His son Ibrāhīm led his troops and ships to victories in Nubia, Arabia and Greece until the fleet was destroyed in 1827 at Navarino. The refusal of Sultan Mahmūd II to give him the promised governorship of Syria led in 1833 to a war in which he was victorious. In another campaign in 1839 he could easily have taken Constantinople except for the intervention of Russia and England, anxious to secure control of trade routes through the Near East. Mehemet Ali had French support, and from 1839 to 1841 general European war loomed. When France yielded he was obliged to draw back into Egypt, to which his hereditary right under Turkish suzerainty was recognized. He also laid the basis of Egyptian domination of the Sudan.

Mehemet Ali reorganized not only the military and naval forces of Egypt but also its government, destroying the power of the provincial beys and centralizing political control. He adopted many French administrative practises, reorganized the taxation system, developed the

harbor of Alexandria and the system of irrigation and introduced land reforms, new crops, new commercial methods, model factories and schools. He was the founder not merely of the present Egyptian royal house but of modern Egypt, which became the leading nation of the Moslem world.

ALBERT H. LYBYER

Consult: Dodwell, H. H., *The Founder of Modern Egypt* (Cambridge, Eng. 1931); Cameron, D. A., *Egypt in the Nineteenth Century* (London 1898) chs. iv-xx; Young, George, *Egypt* (London 1927) p. 35-63; Chirol, Valentine, *The Egyptian Problem* (London 1920) ch. i.

MEHRING, FRANZ (1846-1919), German socialist historian and politician. During his early years Mehring gained distinction as a liberal journalist and critic of the imperial policy of Bismarck. Gradually, however, as he came to lose faith in the premises of political reformism, he was weaned from bourgeois ideology. In the course of a sensational attack in 1890 on the bourgeois press in Berlin he openly espoused socialism, and by aligning himself from the outset with the extreme revolutionary wing of the Social Democratic party he came progressively under the sway of Rosa Luxemburg. During the World War Mehring sharply attacked the policy of cooperation with the government pursued by the moderate Social Democrats, and along with Rosa Luxemburg was instrumental in laying the foundation for the Spartakusbund. As representative of a Berlin electoral district in the Prussian *Landtag* he fought all compromise programs and until his death, brought on by the assassination of his friends Karl Liebknecht and Rosa Luxemburg, was an outstanding intransigent leader.

Mehring's peculiar significance as a Marxist scholar lies in the fields of historiography and literature. His numerous writings, which display an unusual literary and polemic skill, constitute the most versatile application of historical materialism. His history of the Social Democratic movement in Germany is essentially an analytical survey of the political, social and intellectual evolution of Germany prior to 1890. His biography of Karl Marx, thorough and objective in its approach, reestablished the reputations of Lassalle and of Bakunin, who had suffered severely at the hands of Marxist partisans. In Marx, Mehring saw primarily the revolutionary fighter, whose theoretical works were aimed at bolstering proletarian ideology as a means of stimulating the class struggle. As a literary critic

and historian Mehring performed the pioneer service of correlating literature with the underlying social and economic relationships of the period. While recognizing the personal greatness of a Goethe or a Schiller and the spontaneous power of poetical genius in general, he threw his chief emphasis on the thousand threads which connect the literary creation with the material environment of its creator. The range of his interests and knowledge as well as the sureness of his methodology elevates Mehring to a position as yet unrivalled among the historical materialists.

ARTHUR ROSENBERG

Works: *Gesammelte Schriften und Aufsätze*, ed. by Eduard Fuchs, vols. i-vi (Berlin 1929-31); *Geschichte der deutschen Sozialdemokratie*, 2 vols. (Stuttgart 1897-98; 12th ed., 4 vols., 1922); *Karl Marx, Geschichte seines Lebens* (Leipsic 1918; 4th ed. by E. Fuchs, 1923); *Deutsche Geschichte vom Ausgange des Mittelalters*, 2 vols. (Berlin 1910-11); *Die Lessing-Legende* (Stuttgart 1893, 9th ed. Berlin 1926).

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MEITZEN, AUGUST (1822-1910), German agrarian historian and statistician. After a long career as a public official Meitzen was commissioned in 1865 by the ministers of finance and agriculture to prepare a comprehensive description of the exploitation of landed property in Prussia and an evaluation of the agricultural taxation then in force. This study, *Der Boden und die landwirtschaftlichen Verhältnisse des preussischen Staates* (4 vols., Berlin 1868-71; 4 additional vols., Berlin 1894-1908), was based on existing official material, particularly the results of the cadastral survey carried out in accordance with the land tax legislation of 1861. In 1868 Meitzen occupied a leading position in the Prussian statistical bureau and after 1872 in the statistical bureau of the Reich. From 1875 he was likewise professor at the University of Berlin.

Meitzen's fame as an agrarian historian was established by his *Siedelung und Agrarwesen der Westgermanen und Ostgermanen, der Kelten, Römer, Finnen und Slawen* (3 vols. and atlas, Berlin 1895). This work distinguished for its wide scope discusses the early forms of agriculture and settlement in northern Europe. It makes extensive use of a new historical source and boundary or

field maps indicating the division of village lands into fields for various purposes as well as the topography and internal plan of different types of village settlements. From a study of these maps Meitzen attempted to deduce the racial descent and customs of the early settlers and to describe the primitive forms of their agriculture. Although others before him, for example, Georg Hanssen, had worked with such maps, Meitzen was the first to collate them systematically for entire regions. Meitzen's views on the geographical distribution of the early tribes have remained unchallenged; but his theory concerning the origin of agriculture, particularly that of the division of the land into furlongs (*Gewanne*), has been questioned by later writers.

Among Meitzen's other works his *Geschichte, Theorie und Technik der Statistik* (Berlin 1886, 2nd ed. Stuttgart 1903; tr. by R. P. Falkner, American Academy of Political and Social Science, *Annals*, vol. i, 1891, supplement) deserves special attention.

AUGUST SKALWEIT

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MELANCHTHON, PHILIPP (1497-1560), German religious leader and humanist. While professor of Greek at Wittenberg Melanchthon, a typical German humanist, became a disciple of Luther and in 1521 produced *Loci communes* (1521), which systematized the underlying ideas of the Reformation into a classical theory. When Erasmus and other humanists, repelled by Luther's antipathy to culture and rationalism, finally cast their lot with Catholicism, Melanchthon broke with them. But Erasmian ideas continued to influence him throughout his life and during the Peasants' War his humanistic inclinations reemerged under the guise of Lutheranism. Luther repudiated the revolt because he objected to the invocation of the Gospel for worldly ends; Melanchthon attacked it with scarcely less bitterness as a disavowal of intellectualism and culture. The misconceptions which long prevailed in Germany concerning Thomas Münzer's character and aims originated in Melanchthon's hostile portrayal. Failing in

his unrelenting efforts to compromise with the old church he had the leading part in the drafting and defense of the Augsburg Confession. After Luther's death he became the leader of German Protestantism, a role for which he was hardly suited.

Melanchthon's significance for German intellectual and social history lies in the fact that he was the connecting link between Protestantism and humanism and that his influence tempered the hostility of Protestantism to secular culture. Aristotelianism, at times decried by Luther as the embodiment of base human reason, was kept alive in Melanchthon's philosophy, which until the eighteenth century provided the foundation for German culture and political thought and which through preserving rationalistic currents in German Protestantism helped prepare the way for the Enlightenment. Because Melanchthon without expressly subscribing to the doctrine of justification by works had more faith than Luther in the power of human nature for good, his political theory assigned more importance to man made law and to the enforcement of morality and "discipline" by the civil government. The idea of a natural law and a natural order ordained by God and comprehensible to human intellect has a prominent place in his thought. The political authority had a function more significant than merely serving the interests of "peace and the belly": it was the guardian of the Decalogue in so far as the latter applied to external conduct. Since the observation of most of the fundamental tenets of the Protestant religion was included under the category of external conduct, Melanchthon's system left little room for tolerance. Luther's passionate hatred for the standards and practices of the new commercial civilization was not shared by Melanchthon, who revered Roman law and considered it *plenum humanitatis et aequitatis*. Usury, according to Melanchthon, should be punished by the state only if it exceeded a certain amount; thus he followed the tendency of late scholasticism in narrowing the concept of usury to payments on loans for immediate consumption. His work in the field of German education may be interpreted in terms of his humanistic ideas. Although he followed lines marked out by his predecessors Melanchthon, who has been called the "preceptor of Germany," really inaugurated the construction of the modern German school system: he developed the three-class Latin school and contributed to the organization of the uni-

versities, especially by giving to the philosophical faculty for the first time a status entirely independent of the theological faculty.

MICHAEL FREUND

Works: Melanchthon's works are collected in *Corpus reformatorum*, ed. by C. G. Bretschneider and H. E. Bindseil, vols. i-xxviii (Halle 1834-60), vol. xvi of which contains his ethical and political writings, including his *Commentarii in aliquot politicos libros Aristotelis*, p. 416-51; *Supplementa melanchthoniana: Werke . . . die im Corpus Reformatorum vermisst werden*, ed. by Verein für Reformations-Geschichte, Melanchthon-Kommission, vols. i-ii, v-vi (Leipzig 1910-26).

Consult: Ellinger, Georg, *Philipp Melanchthon: ein Lebensbild* (Berlin 1902); Joachimsen, Paul, "Loci communes: Eine Untersuchung zur Geistesgeschichte des Humanismus und der Reformation" in *Luther-Jahrbuch*, vol. viii (Munich 1926) p. 27-97; Maier, Heinrich, *An der Grenze der Philosophie* (Tübingen 1909) pt. i; Sohm, Walter, "Die Soziallehren Melanchthons" in *Historische Zeitschrift*, vol. cxv (1916) 64-76; Dunning, W. A., *A History of Political Theories from Luther to Montesquieu* (New York 1905) p. 14-23; Richard, J. W., *Philip Melanchthon, Heroes of the Reformation*, vol. ii (New York 1898).

MELCHETT, LORD, ALFRED MORITZ MOND (1868-1930), British capitalist and statesman. Mond, the son of a famous German Jewish chemist, was born in Lancashire, educated at Cheltenham and at Cambridge and Edinburgh universities and was called to the bar. In 1895 he entered his father's chemical manufacturing business as a director of Brunner, Mond and Company and he subsequently joined the boards of the Mond Nickel Company, Ltd., and other firms of the Mond group. A Liberal member of Parliament from 1906 until 1923, he followed Lloyd George in the split in the party at the time of the World War. He was first commissioner of works from 1916 to 1921, when he became minister of health. In the latter role he undertook drastic curtailment of the government's post-war housing program as an economy measure. Reelected to Parliament in 1924, Mond disagreed with Lloyd George's land policy and he joined the Conservative party in 1926. He also argued that the needs of post-war industry would be best served by Conservative policies, and he ardently advocated closer trade relations within the empire. He was made a baronet in 1910, a member of the Privy Council in 1913 and a peer in 1928.

Mond was important chiefly as an industrialist. In 1926 he was the leader in forming the \$380,000,000 Imperial Chemical Industries, Ltd., by combining Brunner, Mond and Com-

pany with the United Alkali Company and the British Dyestuffs Corporation; in 1928 the new company absorbed a number of other firms. A strong advocate of rationalization in industry, he carried through in the Imperial Chemical Industries the outstanding British example of post-war rationalization. This was one of the few concerns to provide some form of compensation for workers displaced by rationalization. After the general strike of 1926 Mond took the initiative in trying to bring about improved relations between employers and trade unions and led a group of large employers into negotiations with the Trades Union Congress General Council. The resulting Mond-Turner Report issued in July, 1928, proposed the establishment of powerful standing joint boards for consultation between central employers' organizations and unions. The scheme was approved in general by the unions but was rejected by the Federation of British Industries and the National Confederation of Employers' Organisations in favor of a largely ineffective scheme of occasional consultation. Mond's projects for rationalization and reorganization of industry on a national or even imperial scale were based on an essentially nationalist and capitalist philosophy of collaboration between owners and workers, which became known as Mondism. Mond wrote several interesting technical works on the gas industry and books on industrial relations and economic matters.

In his early life Mond maintained intimate ties with the country of his family's origin. He showed little interest in Jewish affairs until the outbreak of the war, when he became an active supporter of Zionism, which was working in close contact with the imperial diplomatic and military staffs. His most concrete interest in Zionism was in connection with the establishment of Palestine Potash Limited, a British corporation for the development of the mineral resources of the Dead Sea. He was a leading factor in establishing the Jewish Agency for Palestine, which superseded the Zionist Organisation in 1929.

G. D. H. COLE

Important works: *Questions of Today and Tomorrow* (London 1912); *Industry and Politics* (London 1927); *Imperial Economic Unity* (London 1930).

Consult: *Jewish Chronicle*, no. 3221 (1931) 10; Armstrong, H. E., "The Mond and Chemical Industry: a Study in Heredity" in *Nature*, vol. cxxvii (1931) 238-40; "The Meaning of Lord Melchett" in *Spectator*, vol. cxlvi (1931) 4-5; Selekmán, B. M. and S. K., *British Industry Today* (New York 1929) ch. viii.

MÉLINE, JULES (1838-1925), French statesman. Méline was already known as a republican when he was a law student at Paris. He was appointed to the National Assembly in 1872 and was thereafter always returned by his native Lorraine, first as deputy and later as senator. From 1883 to 1885 he served as a minister in the cabinet of Jules Ferry; later in 1896, regarded as one of the principal leaders of the moderate republicans, he became president of the council and supported the Right in order to combat the radicals. For a long time his ministry had a strong majority in both chambers, but when the Dreyfus affair broke out, Méline refused to support a revision of the trial and after the elections of 1898 he was obliged to resign his position. He served again as minister for some months during the World War.

Méline's reputation is due much more to his economic than to his political role. He was in fact the leader of the protectionist movement and the great defender of agriculture. As secretary general of the customs commission he put through the Chamber of Deputies the tariff of 1892, representing a definitive break with the free trade system inaugurated in 1860. He held that the protective system, necessary as it was for French industry, was even more important for agriculture, which remains the principal wealth and the chief occupation of France. The three times he served in the ministry were as minister of agriculture. He inaugurated or developed many practical reforms, especially those which aimed at the organization of farm credit and at benefiting the syndicates of agricultural proprietors. His persevering devotion to this cause brought him real popularity in his later years even among his opponents.

GEORGES WEILL

Important works: *Le retour à la terre et la surproduction industrielle* (Paris 1905, 6th ed. 1912), tr. by Justin McCarthy (London 1906); *Le salut par la terre et le programme économique de l'avenir* (Paris 1919, 2nd ed. Paris 1920).

Consult: Lachapelle, Georges, *Le ministère Méline* (Paris 1928); Hanotaux, Gabriel, in *Revue des deux mondes*, 7th ser., vol. xxxi (1926) 440-53.

MELLAERTS, JACOB FERDINAND (1845-1925), Belgian cooperative leader. As curate of a parish composed of industrious small cultivators Mellaerts observed the sufferings resulting from the current agricultural crisis and realized the necessity of modernizing agricultural methods. He organized his parishioners into an agricultural syndicate and then after resigning as curate

settled in Louvain and devoted himself to the creation of a vast organization of Catholic farmers to promote their social and moral as well as material and professional interests. He was given the necessary support by G. Helleputte and F. Schollaert, with whom he founded the Boerenbond Belge (League of Peasants of Belgium) at Louvain in 1890. Mellaerts served as its first secretary general. In 1902, when he retired, the Boerenbond had a membership of 20,000 grouped in 360 syndicates, or local guilds; it published a monthly organ, instituted mutual farm insurance and conducted two important institutions: a bureau to furnish the local syndicates with raw materials and agricultural machinery and to sell farm products and a central savings and credit bank, which in 1902 had two hundred affiliated local banks, managed according to the Raiffeisen system and of great importance.

The work of Mellaerts and his organization prevented socialism from gaining a foothold among the agricultural population even though it consisted for the most part, particularly in the Flemish portion of the country, of small cultivators. At the present time the great majority of the Flemish agricultural population is organized under the direction of the Boerenbond.

E. LUYTGAERENS

Chief work: *Les caisses rurales d'épargne et de crédit d'après le système Raiffeisen*, tr. from Flemish ms. (Louvain 1894).

Consult: Baudhuin, F., "Le Boerenbond belge" in *Revue économique internationale*, vol. xxii (1930) 113-37; Lugan, A., *Origine et organisation du Boerenbond* (Paris 1925).

MELLO FREIRE, PASCHOAL JOSÉ DE (1738-98), Portuguese jurist. At the age of twelve Mello Freire left his native village of Ancião for Coimbra, where he studied law, receiving his degree of doctor of jurisprudence in 1757. He was appointed to the chair of Portuguese law and legal history at the University of Coimbra in 1772 at the time of Marquis de Pombal's famous reform which eliminated scholasticism and Bartolism in legal education and introduced the study of national alongside Roman law.

In the midst of the great decadence and confusion which characterized Portuguese official instruction in all branches of learning Mello Freire's work stands out as the realization of Pombal's reforms in the field of jurisprudence. He reduced the disconnected multitude of laws to a synthetic, scientific and easily understood system, which he related to its historical origins.

He showed an aptitude for dealing systematically with legal facts and theory and was the first jurist in Portugal to study the history of the native law. On this subject he wrote the authoritative *Historiae juris civilis lusitani* (Lisbon 1794). His *Institutiones juris civilis lusitani* (4 vols., Lisbon 1789-93) and *Institutionum juris criminalis lusitani liber singularis* (Lisbon 1794) were the first systematic treatises on Portuguese civil and criminal law. Mello Freire enjoyed a great reputation and during the reign of Queen Maria I the government appointed him a member of a commission to submit a project for a new code of public law to replace the second part of the old *Ordenações* of the nation. He was also judge of the Court of Appeal (Casa da Supplicação). In his work he appeared a fervent supporter of the absolute monarchy; as a criminologist he was protagonist in Portugal of the new revolutionary spirit of Beccaria and Filangieri, who fought for the humanization of punishment.

LUIS CABRAL DE MONCADA

Consult: Merle, M. P., *Estudos de história do direito* (Coimbra 1923) p. 26-29; Braga, T., *História da Universidade de Coimbra*, 4 vols. (Coimbra 1892-1902) vol. iii, p. 745-46.

MELON, JEAN FRANÇOIS (1675-1738), French economist. Melon was an official in the French financial administration, working at different periods with Duc de La Force, d'Argenson, Abbé Dubois and Law. His *Essai politique sur le commerce* (n.p. 1734, 2nd enlarged ed. 1736, 5th ed. 1761; tr. by D. Bindon, Dublin 1738) is noteworthy not only because it constitutes the first systematic presentation of mercantilist doctrines to appear in France but also because it adumbrates the transition to physiocracy. Melon insists upon the primary importance of agriculture, advocates freedom of trade in grain and even formulates the general principle of economic liberalism, although at the same time he urges the prohibition of exports in raw materials and the restriction of imports in manufactured goods. While assigning to money a prominent role in the creation of national wealth he declares with no less vigor that wealth itself consists of consumable goods and that money is only its symbol. He was in general a metallist and an adherent of the quantity theory, but with the significant reservations more or less common to the branch of neomercantilistic thought which was most directly influenced by Law. It was, however, another neomercantilist, Dutot, who became his most persistent oppo-

ment in the prolonged controversy which the book provoked. Melon, who had inclinations toward the paradoxical, aroused Dutot's criticism by advocating a deliberate increase of the supply of money through such means as devaluation and the issuance of paper money and of certificates of indebtedness. According to his arguments such measures would both favor debtors and stimulate production; and calling attention to the factor of velocity in the operation of the quantity theory he sought to show that a rise in prices would be checked by the increase in production. A careful study of the subject led him to the view that the rate of exchange merely reflected the state of the balance of accounts, exercising no determining influence upon it; in this connection he gave a clear formulation of the theory of gold points. Melon, who was directly influenced by Bernard de Mandeville, is also well known as an apologist for luxury and as an exponent of the materialistic conception of economics.

ROGER PICARD

Consult: Bouzinac, J., *Les doctrines économiques au XVIII^e siècle: Jean-François Melon, économiste* (Toulouse 1906); Harsin, Paul, *Les doctrines monétaires et financières en France du XVI^e au XVIII^e siècle* (Paris 1928) pt. vi, ch. iii; Dionnet, Georges, *Le néomercantilisme au XVIII^e siècle et au début du XIX^e siècle* (Paris 1901) ch. ii.

MENCIUS (372-288 B.C.), Chinese moralist and political theorist. The name is Latinized from Mêng Tzū, Master Mêng, the full name in Chinese being Mêng K'ò. Mencius was born in the state of Lu, now the province of Shantung. The descendant of a family of petty nobles, he was educated in the doctrines advocated by Confucius, which were preponderant in Lu at that time, possibly studying with the disciples of Tzū Szū (K'ung Chi), Confucius' grandson. Later he came in contact with other influences, particularly the Taoist metaphysics and the speculations of the dialecticians, which left a considerable trace on his philosophy. Mencius seems to have supported himself at first by founding a school; later like many wandering politicians of his time he traveled to various courts offering his services as a councilor, with varying but not lasting success.

Mencius was a political thinker rather than a philosopher; he wished to bring about better government in the face of the prevailing political anachry. He had the courage to speak very frankly to the princes whom he met and to point out their moral duties toward their subjects.

"The people are the most important element in a nation and the sovereign is the lightest," and "Heaven sees according as the people see; Heaven hears according as the people hear," are some of his well known sayings. It should not be understood, however, that he wished the people to take an active part in the government. "Some men labour with their minds, and some with their strength. Those who labour with their minds govern others; those who labour with their strength are governed by others." A prince who falls short of his duties has forfeited his right to govern and may be deposed by the nobles. On the other hand, Mencius is convinced that the good moral example of the ruler will have a reforming influence on his subjects. If circumstances are favorable, people are prone to do good rather than evil. "The tendency of man's nature to good is like the tendency of water to flow downwards." Mencius was the first to formulate clearly this view of human nature, which is his most characteristic and most important contribution to Chinese ethics. Goodness expresses itself in four chief virtues: *jên*, altruism; *i*, the sense of equity; *li*, the sense of reverence; *chih*, the knowledge of good and evil. Mencius was a firm believer in the benefits of education and culture. He favored the development of commerce unhampered by taxation. In his land policy he advocated the return to the old communal system, known as the *Ching*, or "well system," in which the land was cultivated in common and a kind of tithe paid to the lord. He vigorously refuted anticultural tendencies like those of the Taoist Hsü Hsing, who preached the return to the simple life in which everybody should manufacture his own necessities. Mencius had great dialectical powers and he often combated other views, notably those of Mo Ti, whose leading principle was "equal love for all," and those of Yang Chu, who was a pronounced individualist and hedonist.

Mencius was brilliant but not profound. For many centuries his influence on the development of Confucianism was comparatively small. Others, like Hsün Tzū, were much more influential. Not until the revival of Confucianism in the Sung dynasty did Mencius attain an exceptional position. The work of Chu Hsi (1130-1200) in particular brought him to the fore; since Chu Hsi, the Book of Mencius, in seven chapters, has always been published, together with the *Lun yü* (the Confucian Analects), as part of the Four Books which were committed to memory by all aspiring to be scholars. In the Confucian

state temples his "soul tablet" was placed with those of Confucius' most beloved personal disciples close to that of the master. His honorary title is the Second Sage.

J. J. L. DUYVENDAK

Works: Mencius, tr. by Leonard A. Lyall (London 1932).

Consult: Liang Chi-Chao, History of Chinese Political Thought during the Early Tsin Period, tr. by L. T. Chen (London 1930) ch. iii; Thomas, E. D., *Chinese Political Thought* (New York 1927); Suzuki, D. T., *A Brief History of Early Chinese Philosophy* (London 1914); Legge, James, *Life and Works of Mencius*, Chinese Classics, vol. ii (London 1875).

MENDEL, GREGOR JOHANN (1822-84), German naturalist and pioneer in the theory of heredity. Mendel came of small peasant farmers in what was then Austrian Silesia. In 1843 he entered the Augustinian monastery in Brunn to devote his life to the natural sciences. He failed to pass the examinations for a teacher's license at the University of Vienna, but thanks to the connections of his abbot he became a professor at the Realschule of Brunn. Mendel spent his leisure hours in the garden of the monastery experimenting with the crossing of peas and came to discover laws of heredity which modern science has proved to hold for all living beings. These three "Mendelian laws" are as follows: in the first hybrid generation all the individuals exhibit a uniform appearance (law of uniformity); in the second hybrid generation the characters of the parents split up in accordance with the proportion of 1 : 2 : 1 (law of segregation); in all subsequent hybrid generations the characters are inherited independently of one another and combine in hybridization in all possible ways (law of independence).

For these experimental laws Mendel also furnished a theoretical explanation which has been accepted with slight modifications by modern science. This explanation rests on the assumption that to the external characters there correspond inner determinants (called today genes) which are brought together in hybridization and which separate out in a pure and unaltered form when sex cells (gametes) are formed.

The story of the tragic neglect of Mendel's work during his lifetime and of its dramatic rediscovery in 1900 by de Vries, Correns and Tschermak working independently of one another has often been told and need not be repeated here. Suffice it to say that although these scientists rediscovered experimentally the equivalent of Mendel's formulations before they came

upon his papers, it was the thoroughness of Mendel's experimental work that provided the true confirmation of their results. Thenceforth Mendel's theories became the corner stone of a new science, which shed a powerful light upon all phases of theoretical and applied biology. Of direct social importance are the applications for plant and animal breeding, where the biologist has been able to operate almost in the manner of a chemist, creating new organic races by combining at will the favorable characters of old stocks. In all the countries of the world and notably in the United States, Germany, Sweden and Russia there exist today institutes of experimental genetics which apply Mendel's principles to improve the quality and the productivity of cultivated plants and domestic animals. Of equal importance is the application of Mendelism by the eugenics movement for the improvement of the human species. It is known today that not only normal human traits but also diseases and afflictions are transmitted in accordance with Mendelian laws. Unfortunately some advocates of eugenics, failing to distinguish between the biological and the cultural or moral phases in complex human situations, have used Mendelism as an apology for a biological and chauvinistic philosophy of history. For this misuse of his doctrine Mendel can scarcely be blamed.

HUGO ILTIS

Consult: Iltis, Hugo, Gregor Johann Mendel: Leben, Werk und Wirkung (Berlin 1923), tr. by Eden and Cedar Paul (London 1932); Bateson, W., *Mendel's Principles of Heredity* (new ed. Cambridge, Eng. 1913); Castle, W. E., *Genetics and Eugenics* (4th ed. Cambridge, Mass. 1930); Babcock, E. J., and Clausen, R. E., *Genetics in Relation to Agriculture* (2nd ed. New York 1927).

MENDELSSOHN, MOSES (1729-86), German Jewish philosopher. Mendelssohn, who was born in Dessau and received a thorough Jewish religious training, was influenced particularly by the philosophic works of Moses Maimonides. In 1743 he came to Berlin, where he lived in extreme poverty, and in 1750 became a tutor in the house of the silk merchant Isaak Bernhard, whose firm he later entered as a partner. He familiarized himself with western learning, was a lifelong friend of Lessing and achieved a place of high standing in the German intellectual world. In his *Philosophische Gespräche* (Berlin 1755), his *Briefe über die Empfindungen* (Berlin 1755) and his *Philosophische Schriften* (2 vols., Berlin 1761) he elaborated his theory of the autonomy

of the aesthetic and prepared the ground for the aesthetics of Kant and Schiller. His *Abhandlung über die Evidenz in metaphysischen Wissenschaften* (Berlin 1764) won the prize of the Prussian Academy in 1763; later he was elected as a member of this body, but because he was a Jew his appointment was not confirmed by Frederick the Great. Mendelssohn's philosophy of religion is best expressed in his *Phädon* (Berlin 1767; tr. by C. Cullon, London 1789), the classic work of the German Enlightenment, in which he sought to demonstrate the immortality of the soul, and in his *Morgenstunden oder Vorlesungen über das Daseyn Gottes* (Berlin 1785), in which he elaborated an ethical universalism colored by religion.

In Jewish intellectual history Mendelssohn occupies a significant place as being the first Jew in modern times to take so active a share as a Jew in the European culture of his time. Many of his contemporaries did not understand this new type of phenomenon. Thus in 1769 Pastor Johann Kaspar Lavater of Zurich publicly demanded that Mendelssohn either be converted to Christianity or refute it. Mendelssohn explained to him in a letter that his Judaism presented no opposition to his philosophical beliefs. The subsequent Mendelssohn-Lavater controversy had many reverberations and occupied the passionate attention of contemporaries. In a treatise against Charles Bonnet's *Palingénésie* ("Betrachtungen über Bonnets Palingenesie," written in 1770 but published only after his death in *Gesammelte Schriften*, vol. iii, p. 135-76) he defined Judaism in contrast with Christianity. From the general Enlightenment point of view he rejected such basic Christian concepts as those of sin, punishment and salvation as well as all the dogmas which contradict reason.

For all peoples the way to blessedness is open by way of the religion of nature or of reason without special revelation. Judaism, which may be reduced to three basic principles—God, providence and the law—is identical with the religion of nature extolled by the Enlightenment plus the laws and commandments which are obligatory only for Jews. The revelation at Mount Sinai was a revelation not of religion but of law. Mendelssohn further developed these ideas in his most complete work, *Jerusalem oder über religiöse Macht und Judentum* (2 vols., Berlin 1783; tr. by M. Samuels, London 1838). Here the demand of the European Enlightenment for tolerance, for the separation of church and state, received its classical politico-philosophical founda-

tion. The state is concerned only with the actions of men, the church with questions of principle. State and church "must instruct, educate, stimulate and inspire, but neither reward nor punish, neither compel nor bribe." The church must neither itself nor with the help of the state exercise the right of coercion over its members, and civil rights are independent of religious affiliation.

Moses Mendelssohn is commonly referred to as the father of the Jewish Enlightenment movement (*Haskalah*). Especially important in this connection were his German translation of the Pentateuch and of the *Psalms* in 1783 and his Hebrew commentary to the Pentateuch (*Biur*), which were attacked by extreme orthodox leaders. The Hebrew periodical which Mendelssohn founded, *Koheleth musar*, is significant in the development of the neo-Hebraic renaissance. Despite his religious conservatism his ideas later became the point of departure for the rise of the Jewish Reform movement.

S. RAWIDOWICZ

Works: *Gesammelte Schriften*, ed. by G. B. Mendelssohn, 7 vols. (Leipsic 1843-45). Much more complete is the *Gesammelte Schriften, Jubiläumsausgabe*, ed. by I. Elbogen and others, vols. i-ii, vii, xi, xvi (Berlin 1929-32).

Consult: Kayserling, Moses, *Moses Mendelssohn, sein Leben und seine Werke* (2nd ed. Leipsic 1888), and *Moses Mendelssohns philosophische und religiöse Grundsätze* (Leipsic 1856); Ritter, I. H., *Geschichte der jüdischen Reformation*, 4 vols. (Berlin 1858-1902) vol. i; Strauss, Bruno, and others, *Moses Mendelssohn, zur 200 jährigen Wiederkehr seines Geburtstages* (Berlin 1929); Cassirer, Ernst, "Die Idee der Religion bei Lessing und Mendelssohn" in *Festgabe zum zehn jährigen Bestehen der Akademie für die Wissenschaft des Judentums* (Berlin 1929) p. 22-41; Rawidowicz, S., "Moshe Mendelssohn" in *Hatekufah* (in Hebrew), vol. xxv (1929) 498-520, and vol. xxvi-xxvii (1930) 547-94; Rawidowicz, S., "Zum Lavater-Mendelssohn-Streit," "Zu den 'Gegenbetrachtungen über Bonnets Palingenesie,'" and "Zu 'Ritualgesetze der Juden'" in Mendelssohn's *Gesammelte Schriften, Jubiläumsausgabe*, vol. vii, p. xi-clvii; Englander, H., "Mendelssohn as Translator and Exegete" in Hebrew Union College, *Annual*, vol. vi (1929) 327-48.

MENDICANT ORDERS. *See* RELIGIOUS ORDERS; BEGGING.

MENDOZA, ANTONIO DE (1490-1552), Spanish colonial administrator. Mendoza, a Castilian nobleman, was employed on various diplomatic missions during his early career. He reached Mexico city in 1535 as the first Spanish viceroy on the American continent. This position was introduced into the New World when

the Spanish authorities became convinced that the semicivilized subject people of New Spain and its turbulent conquerors could be governed only by a person close to the throne who should be vested with great authority as the representative of the king. Mendoza held office until 1550; from 1551 to 1552 he served as viceroy of Peru. In the exercise of his manifold political, ecclesiastical, economic and general welfare functions he established the prestige of his office, while the policies he formulated inaugurated a stable system of government which lasted, with some modifications, through the colonial era. New Spain also made significant beginnings in agriculture, industry and trade. Indigenous crops were encouraged and European plants—wheat and sugar—and animals were introduced in large numbers; great ranches and plantations soon came into existence. On the basis of support given to the breeding of merino sheep, the silk worm and the mulberry an extensive textile industry developed in the towns. In 1548 there began an era of extremely active silver mining. Progress in arts and letters was rapid also. In 1536 Mendoza caused to be set up the first printing press of the New World; printing of books began in 1539.

Mendoza endeavored to secure better treatment for the natives, to check abuses in personal service, in the mines and under the encomiendas and to prevent the extension of chattel slavery. He regulated the status of Indian villages, their government and their lands and aided the church in its efforts to provide educational facilities for the Indian nobility and founding mestizos. But good intentions were frequently crossed by the demands of the king's exchequer and by the necessity of an adequate labor supply. Because of the bitter opposition of the colonists Mendoza brought about the suspension of the famous New Laws of 1542-43 for the liberation of the natives. As a result of this and other arrangements the fundamental questions of class relations were settled by the time he relinquished his post.

CLARENCE H. HARING

Works: "Relación, apuntamientos y avisos que por mandado de S. M. di (yo D. Antonio de Mendoza) al Sr. D. Luis de Velasco" in *Instrucciones que los virreyes de Nueva España dejaron a sus sucesores* (Mexico 1867) p. 227-40.

Consult: Aiton, Arthur Scott, *Antonio de Mendoza, First Viceroy of New Spain*, Duke University, Publications (Durham, N. C. 1927); Pérez Bustamante, Ciriaco, *Los orígenes del gobierno virreinal en las Indias españolas*, Don Antonio de Mendoza, primer virrey de

la Nueva España (1535-1550) (Santiago, Spain 1928); Priestley, H. I., *The Mexican Nation, a History* (New York 1923); Simpson, Lesley Byrd, *The Encomienda in New Spain*, University of California, Publications in History, vol. xix (Berkeley 1929).

MENÉNDEZ Y PELAYO, MARCELINO (1856-1912), Spanish historian. Menéndez y Pelayo was educated at the universities of Barcelona, Madrid and Valladolid. He taught at Madrid from 1878 to 1898 and from 1898 to 1912 directed the Biblioteca Nacional. Among the scholars who influenced his career were José Ramon Luanco, the philosopher Francisco Llorens, the literary historian Manuel Milá y Fontanals and particularly Gumersindo Laverde y Ruiz, who sought to rehabilitate Spanish philosophy.

A polemic between liberals and reactionaries was the immediate inspiration for two of Menéndez y Pelayo's most important works, *La ciencia española* (1876) and *Historia de los heterodoxos españoles* (3 vols., 1880-81). In these two books the author attempts to ascertain Spanish traits, to note their characteristic manifestations in philosophy in order to demonstrate their attachment to orthodoxy and to provide a basis for an indigenous discipline designed to replace the current foreign, and therefore sterile, importations, and to catalogue their scientific and intellectual accomplishments particularly during the Renaissance. At the same time he defends the Inquisition from the charge of having adversely affected intellectual productivity. The Spanish genius as conceived by Menéndez y Pelayo is manifested in all the peoples who have inhabited the peninsula—Roman, Moslem, Jewish and Christian—as well as in those of Hispanic origin. Menéndez y Pelayo's later works were concerned primarily with literature and were more sympathetic and less combative than his early productions. But his basic ideas and motives remained unchanged; they dominated his vast philosophical introduction to literary history and his studies in Hispanic Latin, Castilian, Catalan, Portuguese and Hispanic American literature.

The works of Menéndez y Pelayo are distinguished by profound erudition, aesthetic appreciation and clarity of presentation, although by reason of their vast scope they do not always come up to modern standards of scholarship. They are important principally because they served to revive Spanish intellectual history when it was at its lowest ebb. Many pupils and followers have continued Menéndez y Pelayo's

work. His reputation, no longer the subject of exaggerated adulation, has emerged from the obscurity in which it had been enshrouded, and his work forms one of the bases of the present national revival and serves to stimulate the movement for closer unity among the Iberian peoples as well as regionalism within the peninsula itself.

B. SÁNCHEZ ALONSO

Works: *Obras*, 22 vols. (Madrid 1883-1908); *Obras completas*, 13 vols. (Madrid 1911-24).

Consult: Artigas y Ferrando, Miguel, *Menéndez y Pelayo* (Santander 1927); Bonilla y San Martín, Adolfo, *La representación de Menéndez y Pelayo en la vida histórica nacional* (Madrid 1912), and Marcelino Menéndez y Pelayo (1856-1912), Real Academia de la Historia, Boletín, extra number, May, 1914 (Madrid 1914); González Blanco, Andrés, *Marcelino Menéndez Pelayo (su vida y su obra)* (Madrid 1912); Bell, Aubrey F. G., *Contemporary Spanish Literature* (London 1925) p. 263-74; Warren, L. A., *Modern Spanish Literature*, 2 vols. (London 1929) vol. ii, p. 630-42.

MENGER, ANTON (1841-1906), Austrian jurist. Menger received his degree in law from the University of Vienna, where he became a professor of civil procedure. He is known for his works on the juridical theory of socialism, which he considered to be as important as the economic theory. While seeking its antecedents among the pre-Marxian socialists, he thought he was able to prove that Marx and Rodbertus borrowed essential elements of their systems from the so-called utopian thinkers, including the Saint-Simonians, Proudhon and William Thompson. He held that Marx lacked a legal critique of private property undermined by internal contradictions under a capitalist regime. Such a critique should complete his theory of surplus value and distinguish clearly between three different kinds of socialist rights upon which the possible juridical systems of socialism can be based, and which correspond to different economic organizations; namely, the right to the entire product of labor, the right to work and the right to exist. To the first corresponds collective ownership, the administration of production by workers' groups and the individual enjoyment of consumers' goods; to the right to exist corresponds nationalization of property, administration and consumption (communism). Menger's great merit lies in his having shown these two concepts of socialist rights to be irreducible antinomies and that it has been a fundamental defect of the socialist systems not to have clearly opposed them. He thus anticipated

post-war socialist theory, which recognizes the inevitable conflict under any regime between producers and consumers and which has attempted to solve it by establishing an equilibrium between their opposing rights and interests.

Menger took part in the discussion of the projected German Civil Code of 1896 and strongly influenced its definitive draft. In particular he pointed out that the civil procedure envisaged by the code was altogether unfavorable to the poor. For their interests demanded procedure free of charge and freedom for the judge to make decisions based on the situation and according to the dictates of his conscience without being bound by the letter of the law. Menger was thus a precursor of the "free law" movement, and in this respect his ideas have influenced the new Swiss code. He was moreover one of the first to emphasize that the disciplinary power of a large scale employer over his workers, whereby he imposes unilaterally both shop regulations and fines, is illegitimate, for one of the parties to the labor contract thus becomes judge of his own cause. He concluded that not shop committees but direct intervention by the state was necessary to combat the arbitrariness of the employer.

This rigorous étatist tendency was accentuated particularly in his *Neue Staatslehre* (Jena 1903, 3rd ed. 1906); Menger's socialism is state socialism, which presumes a special reinforcement of the administrative power, threatening entirely to absorb the judicial and to become independent of the legislative power, while private law becomes entirely submerged in public law. Work is organized in a strictly hierarchical manner, the chiefs being appointed by the municipalities and the communes; the latter are themselves not autonomous organizations but organs of the central power. His absolute negation of democracy in the economic field is one of the most serious snags in Menger's system, which represents a sort of communist étatism emphasizing the rights of consumers against those of producers on the basis of a unilateral affirmation of the right to exist.

GEORGES GURVITCH

Works: *Das Recht auf den vollen Arbeitsertrag in geschichtlicher Darstellung* (Stuttgart 1886, 3rd ed. 1904), tr. by M. E. Tanner as *The Right to the Whole Produce of Labour* (London 1899); *Das bürgerliche Recht und die besitzlosen Volksklassen* (Tübingen 1890, 4th ed. 1908); *Über die sozialen Aufgaben der Rechtswissenschaft* (Vienna 1895, 2nd ed. 1905).

Consult: Grünberg, K., in *Zeitschrift für Volkswirtschaft, Sozialpolitik und Verwaltung*, vol. xviii (1909)

29-78, with bibliography of Menger's works; Andler, Charles, Introduction in French edition of *Neue Staatslehre*, tr. by E. Milhaud as *L'état socialiste* (Paris 1904) p. i-xlv; Kampffmeyer, Paul, "Vom Einfluss des Staates auf das Wirtschaftsleben" in *Sozialistische Monatshefte*, vol. vii (1903) 491-502.

MENGER, CARL (1840-1921), founder of the Austrian school of economics. Menger started his career in the Austrian civil service and was appointed professor of economics at the University of Vienna in 1873; in 1903 he withdrew from teaching to devote himself exclusively to scientific research. Like Jevons and Walras, who at approximately the same time independently advanced similar doctrines, Menger proceeds, in the explanation of economic phenomena, from the values which men place on goods because of their utility. This exceedingly obvious idea, which accords with the well known concept that sees in economics primarily an adaptation of means to ends, was pursued no further by the classical school because the latter was unable to differentiate between the utility of the total quantity of a commodity and that of a specific unit of a commodity. Through consistent application of the principle of marginal utility formulated by him Menger succeeded in explaining first the subjective value of consumers' goods, called by him goods of the first order, as they serve human purposes directly; then the value of productive goods, goods of higher order, which satisfy human needs indirectly. Herewith was created the foundation of a new theory of price and distribution, which Menger evolved in its basic characteristics and which has been built up by his successors, especially Böhm-Bawerk and Wieser. The methodological importance of this theory consists primarily in the fact that it endeavors to explain economic phenomena by "understanding" the behavior of the individual: demand and supply do not determine prices immediately but indirectly by determining in the first place subjective value. Further, this analogy between the formation of prices and of subjective value makes it possible to explain in the first approximation the basic features of distribution in every economic system, with the aid of the concept of social value, without having recourse to price theory. With regard to the question of method Menger in sharp controversy with the German historical school defended the concept later taken up by Windelband and Rickert that there are two distinct, equally legitimate kinds of research: theoretical and historical. The latter searches out

the particular, the unique in phenomena; the former has the knowledge of the universal as its aim. Within theoretical research itself there are, according to Menger, two approaches: the exact and the empirico-realistic. The latter goes less far in abstraction in that it strives only after empirical, not universally valid laws.

Of Menger's other achievements his contribution to the doctrine of money is of importance. Money originated in the course of transition from direct to indirect exchange, with the most salable commodity assuming the role of the medium of exchange. He distinguished sharply between fluctuations of the value of money in general and those fluctuations which proceed from the money side, and emphasized the fact that the primary criterion for the size of money demand is not the velocity of circulation of money but the total amount of cash balances in the hands of financial institutions and individuals. That Menger's doctrines are known largely in the form in which they were expounded by other authors is explained by the fact that both of his chief works were soon out of print and by the fact that Menger arranged for no new editions.

FRANZ X. WEISS

Important works: *Grundsätze der Volkswirtschaftslehre* (Vienna 1871; 2nd ed. by Karl Menger, Jr., 1923); *Untersuchungen über die Methode der Socialwissenschaften, und der politischen Oekonomie insbesondere* (Leipzig 1883); *Die Irrthümer des Historismus in der deutschen Nationalökonomie* (Vienna 1884); "Zur Theorie des Kapitals," and "Grundzüge einer Klassifikation der Wirtschaftswissenschaften" in *Jahrbücher für Nationalökonomie und Statistik*, n.s., vol. xvii (1888) 1-49, and n.s., vol. xix (1889) 465-96; "Geld" in *Handwörterbuch der Staatswissenschaften*, vol. iv (3rd ed. Jena 1909) p. 555-610; "On the Origin of Money," tr. by C. A. Foley in *Economic Journal*, vol. ii (1892) 239-55.

Consult: Schumpeter, J., in *Zeitschrift für Volkswirtschaft und Sozialpolitik*, n.s., vol. i (1921) 197-206; Wieser, Friedrich, in *Neue österreichische Biographie*, vol. i (Vienna 1923) p. 84-92; Zuckerkandl, Robert, in *Deutsches biographisches Jahrbuch*, vol. iii (Berlin 1927) p. 192-200; Weiss, F. X., "Zur zweiten Auflage von Carl Mengers 'Grundsätzen'" in *Zeitschrift für Volkswirtschaft und Sozialpolitik*, n.s., vol. iv (1924) 134-54; Engländer, Oskar, "Karl Mengers Grundsätze der Volkswirtschaftslehre" in *Schmollers Jahrbuch*, vol. li, pt. i (Munich 1927) p. 371-401; Schmoller, Gustav, *Zur Literaturgeschichte der Staats- und Sozialwissenschaften* (Leipzig 1888) p. 275-94.

MENNONITES. *See* SECTS.

MENSHEVIKS. *See* RUSSIAN REVOLUTION; BOLSHEVISM.

MENTAL DEFECTIVES is a term applied generally to individuals who are unable to maintain themselves in society because their mental development is so retarded that they must be isolated from the rest of the community or kept under special forms of supervision. As intellectual retardation varies quantitatively, the higher the requirements for social maintenance, the larger the number of mental defectives.

In the early nineteenth century in the United States custodial care of a very inadequate sort was provided in insane asylums, almshouses and rarely in special institutions, for only the lowest degrees of mental deficiency—according to present classification, idiocy and low grade imbecility. Idiocy was not clearly differentiated from mania until 1828 by Esquirol. Meanwhile, largely through the influence of experiments by Itard in the education of a boy found roaming in the woods of Aveyron devoid of articulate speech and human habits (*De l'éducation d'un homme sauvage . . . de l'Aveyron*, Paris 1801; tr. by G. and M. Humphrey as *The Wild Boy of Aveyron*, New York 1932), organized efforts were undertaken to overcome congenital defects of the mind through education. In spite of the discouraging results obtained by Itard his method of sensory and motor training, which consisted of ingenious graduated exercises for the development of perception and coordination, was developed to a high degree by his pupil Seguin and in the teaching of both mental defectives and normal children by Maria Montessori. Seguin's influence on the training of mental defectives and especially on the development of institutions and educational facilities for their care was very profound. While there were but two institutions for the feeble-minded in Massachusetts prior to his arrival in the United States in 1850, by 1865 schools were established in New York, Pennsylvania, Ohio, Connecticut, Kentucky and Illinois largely through his inspiration. On the other hand, the extravagant hopes which he aroused that the problem of mental deficiency would be solved by formal education were not realized, and institutions equipped with apparatus for teaching according to his "physiological method" gradually sank to regular custodial standards. Through the impetus of his efforts, however, facilities for the care of mental defectives were improved.

Mental defectives were regarded in Seguin's time merely as handicapped members of society who required special educational treatment, and the chief social aspect of the problem was that

of their dependency. It was not until the development of quantitative mental tests by Binet that mental defectives came to be regarded as a great menace to the welfare of society. The tests made it possible to express retardation in terms of mental years and thus to distinguish more clearly the milder cases of mental deficiency, classified in the United States as morons, or high grade defectives. Since high grade defectives, persons scoring a mental age of from seven to twelve years in the Binet-Simon scale, represent in the aggregate about three times the number of low grade defectives, the problem of mental deficiency came to assume vast proportions. Goddard, one of the first to use the Binet-Simon tests in the United States, examined the inmates of a juvenile detention home and found among them a very large number of mentally retarded persons. Other limited researches with the tests led him to contend that problems of "the criminal, the pauper and the intemperate" could be attributed largely to mental deficiency. Goddard also made genealogic studies of the feeble-minded and concluded that mental deficiency was a unit character inherited in accordance with the Mendelian laws. Under his influence interest in the problem of mental deficiency was heightened and intelligence tests came to be regarded as the key to the solution of the problems of crime and pauperism. Enthusiasts, who assumed that most criminals, vagabonds, prostitutes and paupers were mentally deficient and that their deficiency was inherited, urged that the solution of the problem lay in rooting mental defectives out of human stock. This they hoped to accomplish through state surveys, registration, isolation and sterilization; the problem of the mental defective appeared to them to be largely one of eugenics.

Later wide use of the tests, control studies of various delinquent groups and the examination through group intelligence tests of nearly two million recruits in the World War revealed that these bold conclusions were unwarranted. The intelligence of penitentiary groups as measured by tests was found to be similar in distribution to that of the general population. Furthermore if a mental age of twelve years be accepted as the border line of mental deficiency, according to the results of the army test over 30 percent of the population would be included; and if a mental age of nine and a half years be adopted, at least 7 percent of the white population would be included. Except for the more severe cases of mental deficiency diagnosis on the basis of educational or test criteria carries no certainty as to

social adaptability. The feeble-minded, who are so diagnosed on the basis of intellectual retardation plus failure to adapt themselves socially, that is, failure to earn a livelihood and to remain non-delinquent, represent a small fraction of that very large group of intellectually retarded who by virtue of favorable environment and good fortune or both are able to maintain themselves in society. The number of feeble-minded in the institutions of states with the best facilities for their care represent less than one in two hundred and fifty of the population; even if the resources of the state were multiplied by ten, only a small portion of the intellectually retarded as determined by the criteria of mental age could be accommodated. Of the feeble-minded who are now institutionalized a fair proportion can be socially reclaimed even to self-maintenance in the community, as the work of Fernald and Bernstein has shown.

The cause of institutionalization of mental defectives is usually dependency or actual or potential criminality. When a mental defective is adequately cared for by his family, the state prefers to permit him to remain at home to save the expense of institutional costs. The family, on the other hand, may reject institutional placement even when this is urged by school or state authorities. The state if insistent must then legally prove the existence of neglect by parents with regard to supervision and care or of delinquency as defined by law. The problem of coercing families to surrender mental defectives to the care of the state is relatively unimportant in comparison with the problem of caring for defectives willingly thrust upon it. Agencies concerned with admission of defectives to state institutions usually have long waiting lists and political pressure is sometimes used to favor the acceptance of a defective out of turn. Discrimination is necessary and important in the selection of urgent cases requiring institutional placement. Once the diagnosis of mental deficiency is made and institutional care is an accepted recommendation, the severest cases in terms of immediate difficulty for the social group receive first consideration. A general and convenient rule is to judge a given case on the basis of degree of delinquency, dependency and deficiency. A delinquent imbecile, for example, is chosen in preference to an imbecile who is dependent although non-delinquent; a dependent idiot would be selected prior to a dependent imbecile, a seriously delinquent moron prior to a mildly delinquent one.

Programs advocated by the eugenicists with a view to raising the mental level of the entire population by sterilizing or isolating those who fall below an artificially selected intellectual standard have been found to be neither practical nor scientific (*see* EUGENICS). Sterilization of the mentally defective is limited to such cases as those in which by careful individual study there appears a reasonable certainty that the potential issue will be charges of the state. There are in institutions a number of feeble-minded who are capable of supporting themselves in the community but who are retained by superintendents because of known sexual proclivities. When sterilization is employed in these and other special cases it does not imply adoption of a eugenic program but must be regarded as a practical manoeuvre occasioned by limited facilities for handling the problem in institutions or colonies or through extramural care.

DAVID M. LEVY

See: MENTAL DISORDERS; MENTAL TESTS; PSYCHOLOGY; ABNORMAL PSYCHOLOGY; PSYCHIATRY; ALIENIST; MENTAL HYGIENE; EUGENICS; CRIMINOLOGY; PUBLIC HEALTH; HEREDITY; ENVIRONMENTALISM.

Consult: Davies, S. P., *Social Control of the Mentally Deficient* (new enlarged ed. New York 1930); Goddard, H. H., *Feeble-mindedness; Its Causes and Consequences* (New York 1914); Miner, J. B., *Deficiency and Delinquency; an Interpretation of Mental Testing* (Baltimore 1918); "Psychological Examining in the United States Army," ed. by R. M. Yerkes, National Academy of Sciences, *Memoirs*, vol. xv (Washington 1921); Great Britain, Mental Deficiency Committee, *Report*, 3 vols. (1929); Fernald, W. E., "A State Program for the Care of the Mentally Defective," Bernstein, Charles, "Colony and Extra-institutional Care for the Feeble-minded," and Matthews, M. A., "One Hundred Institutionally Trained Male Defectives in the Community under Supervision" in *Mental Hygiene*, vol. iii (1919) 566-74, vol. iv (1920) 1-28, and vol. vi (1922) 332-42; Town, Clara H., and Hill, G. E., *How the Feeble-minded Live in the Community* (Buffalo n.d.); Sherlock, E. B., *Minds in Arrear* (London 1932); Jennings, H. S., *Biological Basis of Human Nature* (New York 1930); Hogben, L., *Genetic Principles in Medicine and Social Science* (London 1931) ch. iv.

MENTAL DISEASE. *See* MENTAL DISORDERS.

MENTAL DISORDERS, or diseases, are always defined by reference to an explicit or implicit formulation of personality which sets limits to the manifestations of human individuality. That which deviates from the norm thus created is regarded as aberrant and is considered genius or crime or mental disorder, depending upon a large number of secondary definitions

which fix the individual's relations with the group.

Prenaturalistic views of human personality consider mental disorders as the results of manipulations of the victim by transcendental agencies, as, for example, in the case of belief in demoniacal possession. Naturalistic interpretations may be classified into naïve mechanistic doctrines, such as those which regard mental disorders as the results of medical diseases and attribute them to lesions in the nervous system, the endocrine glands or in other organs of the body; and the more sophisticated biological doctrines, according to which mental disorders are more or less rigidly determined by the individual's genetic constitution or his environment or by a combination of both. Most psychological theories of mental disorder belong in these categories, for example, that of conditioned response behaviorism, the psychoanalytic doctrine of libido fixation and other dynamic explanations. Finally, anthropology views mental disorders as the result of unduly complicated interpersonal integrations arising from innately conditioned but culturally directed tendency systems.

The mystical and magical approach to mental disorder survives in folk belief; it casts a shadow of awe and fear upon patients called insane, keeps many persons from approaching the confines of psychiatric hospitals and greatly interferes with public enlightenment as to the nature of mental disorders. This attitude is fostered by clergymen and others who undertake the healing of mental patients, when not frankly by exorcism, at least by magical appeals to better nature and to will power. The medical approach predominates in modern psychiatry and has produced a considerable literature, much of which is controversial as to classifications, pathologies and therapeutic measures. The medical ideal is to discover the disease entity, with its specific cause, course and outcome. This method was followed in the case of dementia paralytica, a neurosyphilitic disease first clearly defined by Bayle in 1822. Kraepelin, who was greatly influenced by the medical ideal, in 1896 diagnosed approximately 28 percent of his cases as dementia paralytica. After the adoption of Wassermann's serological technique for detecting syphilis he diagnosed as dementia paralytica only about 9 percent of his cases.

Destructive changes in the central nervous system are an invariable concomitant of dementia paralytica. This is not the case, however, with the functional mental disorders which are

not associated with known changes in the body. A considerable variety of major functional mental disorders had been recognized before 1886. Kraepelin reduced these to three: dementia praecox, manic depressive psychosis and a group which in 1893 he differentiated into paranoia and paraphrenia. In 1901 over 50 percent of the cases admitted to his clinic at Heidelberg were diagnosed as dementia praecox. Ten years later fewer than 20 percent of his cases were so diagnosed, indicating that this symptomatic prognostic classification was not completely successful even when applied by its creator. It has nevertheless had wide influence and has been adopted with but slight modification by most hospitals in the United States and Canada. A study made by the author of the diagnostic distribution of the patient population in sixty hospitals treating mental disorders shows that in 1929 slightly under 62 percent of 124,028 patients were classified according to the rubrics of the functional psychoses. The ratio of the total number of paranoid and dementia praecox cases to the total number of cases of manic depressive psychoses is 3.75 to 1; the ratios in different hospitals vary, however, from 49 to 1 to 1 to 2.5, and the percentage of the functional disorders varies from 48 to 98 percent of the total number of patients. As there are no determining factors which may explain these wide discrepancies other than the personal equations of psychiatrists, it must be concluded that the symptomatic prognostic classification does not yield results which can be utilized statistically.

Medical treatment of mental disorders has been extremely varied. Hydrotherapeutic, occupational therapeutic, pharmacological, organotherapeutic and recreational methods have vied with surgical operations ranging from modified eviscerations to injections of sundry substances into the body. Elevations of temperature some degrees above that of the healthy body are more promptly fatal to the germ of syphilis than to the human tissues; this form of therapy has been useful therefore in the case of patients suffering from dementia paralytica. Enthusiasts are now extending its use to other mental disorders. Patients formerly chained in dungeons and flogged; not long since exsanguinated and purged; recently drugged, isolated and restrained; still more recently treated for teeth and tonsil infections or given spinal injections of horse serum, may now receive treatment by infection with malaria or have their bodily temperature raised by electrical induction.

The psychiatric hypothesis which holds that most or all mental disorders are ordained in the germ plasm has been applied to functional disorders by von Verschuer, who found that thirty-one of thirty-four identical twins and only three out of eight fraternal twins suffered from dementia praecox, or schizophrenia; his data are equally impressive in the case of the manic depressive psychosis. Since the hereditary equipment of identical twins may be presumed to be the same, any differentiation must be the result of environmental factors. For this reason studies of identical twins are relevant, while other studies of human heredity are of limited applicability to the problem of mental disorder. A hereditary neuropathic or psychopathic taint has often been held to be important as the determining factor in mental disorders; the comparative frequency of this taint in relatives of the non-psychotic and the psychotic has been calculated to be approximately 70 to 77, while the frequency of severe mental disorder in a parent of a non-psychotic person and in a parent of a psychotic person seems to be approximately 1 to 6. The influence of psychotic parents may, however, operate through their functioning as part of the early environment of the child rather than through heredity. The psychiatric practises which arise from the heredity doctrines are chiefly preventive—eugenic reform, segregation and sterilization (*see* EUGENICS).

Environmental influence has been stressed particularly in the works of Freud, Jung and Adolf Meyer and also in the attempts to explain mental disorders on the basis of the conditioned reflexology of Pavlov. Freud came to regard mental processes as essentially unconscious, to consider conscious mental processes merely as isolated acts although parts of the whole psychic entity and to contend that sexual impulses play an insufficiently appreciated role in the causation of nervous and mental disorders and of normal behavior. He conceptualized a force in the mind which functions as a censor, and which excludes from consciousness and from any recognized influence upon action all tendencies which are uncongenial to it. The force of repression falls especially upon the sexual instincts, the frustration of which may lead to the development of neurosis, psychosis or crime. This frustration generally involves a regression to points of libido fixation established in earlier life. Whether the conflict between the censor and instinct finds a healthy solution or leads to a neurotic inhibition of function depends upon the relative strength

of the forces concerned. The first important conflict in the course of personality growth is the Oedipus complex, which arises in the child's relation to his parents; those destined to succumb to mental disorder fail habitually in their attempt to grapple with this problem. If the patient can effect a transference to the physician, it is generally possible to assist him by the method of free association and through the interpretation of dreams to overcome internal resistances and to do away with repressions, so that he may replace unconscious by conscious mental acts. In 1907 Jung amplified Freud's results in his report upon three years of psychoanalytically oriented experimental work and clinical observation on dementia praecox patients. He contended that dissociated complexes explained much that was meaningless and bizarre in the speech and behavior of such patients. In the United States Smith Ely Jelliffe and William Allanson White identified themselves with this type of psychogenetic explanation, and it is chiefly through their influence that a rigid medical formalism has been avoided in American psychiatry.

Adolf Meyer as early as 1906 interpreted mental disorders as inadequate habits of dealing with the difficulties of life. In 1908 he defined mind as a "sufficiently organized living being in action and not a peculiar form of mind stuff" and emphasized the important fact that "mental activity is really best understood in its full meaning as the adaptation and adjustment of the individual as a whole, in contrast to the simple activity of single organs." He has devised a nomenclature for psychiatry which is the nearest approach to a basis for reliable statistics that has yet appeared. Adopting *ergasia* as the best term for performance and behavior and psychobiologically integrated activity in general, including mentation, he has derived from it the following classification of reaction types: the anergastic disorders, or organic deficits as acquired defect reactions or dementias; the dysergastic or support disorders, represented by the deliria and hallucination disorders of infection, poison and malnutrition; the parergastic and paranoic reactions, which are diffuse and general as in the schizophrenic, or circumscribed and systematized as in paranoia or in the paranoic, or paranoid, types; the thymergastic or affective reactions of excessive speeding up or of depression and slowing, without essential distortion; the merergastic or minor psychosis, with neurasthenic, anxiety, obsession, submersion and epi-

leptic groups of reactions; and the oligergastic states of defective development represented by idiocy, imbecility and moron types.

Psychiatric theory has more recently been reoriented on the basis of an appreciation of the fact that the human organism is made up not only of parts of the physicochemical world but also of accessions acquired from the universe of culture. This approach recognizes that the person, psychobiologically conceived, maintains organization, communal existence and functional activity in and within both the physicochemical and the superorganic cultural universe. The study of the life course of the individual becomes more intelligible when personality is conceived as the hypothetical entity which manifests itself in interpersonal relations, the latter including interactions with other people, real or fancied, primarily or mediately integrated into dynamic complexes; and with traditions, customs, inventions and institutions produced by man. These interactions indicate that in a somewhat homogeneous culture complex there is a rather consistent course of growth of personality. Along with the elaboration of physicochemical factors, there is a progressive elaboration and differentiation of motives. These integrating tendencies are acquired from a steadily expanding series of culture surrogates, such as the mother, the family group, teachers, companions, chums, friends, love objects, enemies, employers and colleagues. The motives manifest themselves in the integration of total situations or systems involving two or more people, real or fancied, and a variety of cultural elements. Within these motives are demands for certain activities, sometimes consciously formulated in terms of a goal, at other times devoid of any conscious formulation, in which case the activity is unnoted by the participants. Frequently the formulation is imperfect and is expressed in accidental, meaningless or mistaken activity or rationalized in plausible abstractions from common experience without much regard to the possibility of consensual validation. When the activity demanded by the system has been consummated, the motivation is replaced by another. Not infrequently, however, the activity is complicated by conflicting motives and their attendant processes of system integration; in such cases maladjustive or non-adjustive processes are observed.

The activities both of integrating and of resolving interpersonal situations as well as of dealing with the non-personified world may be

envisaged as manifestations of a biological organism possessing instrumental receptor and effector organs, which constitute its zones of interaction with the environment. The characteristics of these zones are fixed primarily by the constitution which the particular organism has developed through heredity and nutrition. If the individual at birth is endowed with little possibility of growth of the higher nervous system, or if early injury arrests its growth or if there is some chemical deficiency in the food which delays or enfeebls the organization and functional activity of these tissues, what is commonly called mental deficiency results. A great part of the cultural heritage which would otherwise be available then remains irrelevant; it cannot be assimilated into the personality, which is correspondingly limited in its capacity for integration with people and with the materials of civilization. If the individual from birth through infancy and childhood is subjected by the mother and the family group to highly inconsistent inhibitory and facilitating experience (if the family group is psychotic or if the child is generally unwelcome), the individual is likely to show increasing deviation from consistent growth through adolescence. Unless he is extraordinarily fortunate in his school situation, it is probable that his deviation will be so great that he will not develop the tendencies characteristic of pre-adolescent and adolescent individuals, so that he will be what is commonly designated as a psychopathic personality, a nuisance within the social fabric, incapable of accommodation and cooperation and unequal to the task of restraining himself from immediate satisfactions. Thus while the mentally deficient are fundamentally handicapped by constitutional factors, psychopathic personalities are the products of experience; both are relatively incompetent in their relations with other people.

The symptomatic acts which are expressions of the mentally disordered are therefore most meaningful for psychiatry when their interpersonal contexts are known. They are otherwise psychological, physiological or biophysical aspects of human processes, unilluminating in reference to the personality chiefly concerned. Formulations in terms of mental mechanisms, neurological and endocrinological entities, reflex arcs and somatic tension sets are too general and too partial to aid in the understanding of mental health or its absence. They apply in cases of crippled personalities suffering from dementia paralytica, which, since it is characterized by a

specific chain of symptomatic events, can be diagnosed with a high degree of probability. But even the interpersonal activity of the patient in the early stages of this malady is explicable only when referred to his personal history. Psychiatric consideration of dementia paralytica becomes a matter chiefly for physiology only after the disease process has destroyed the tissues associated with human as contrasted with infrahuman behavior.

Almost all of the milder maladjustments which are evidenced in personal, domestic and occupational inefficiencies of various types, some seemingly because of physical illness, others clearly mental and still others a combination of the two, arise from warp encountered in earlier stages of personality growth, often in turn the effect of mild mental disorder in one or more of the family group. Once established, some maladjustments are very difficult to remedy; among them, for example, is the obsessional state, in which morbid doubts, scruples, fears or preoccupation with ritualistic activities and systems of thought are substituted for direct interpersonal adjustment, to the great detriment of useful living and to the extreme inconvenience of those who are in contact with the patient. The obsessed person may be described as one who has come to utilize gestures and words, cultural entities, in an unduly complex and individualistic fashion. The performances of the person who must continually clear his throat, emit grunts or activate various expressive neuromuscular units in lieu of aggressively compelling the submission of others, or of the sexually deviated male who must parody feminine behavior in order to stimulate and frustrate the equivalent motivations in other men he encounters are comparable to compulsions to step on certain cracks in the pavement or to obfuscate every issue with superficially irrelevant or incomprehensible theorizations. The obsessional states probably surpass in their vicious cultural consequences the more immediately grave paranoid states, wherein motivations which conflict with early inhibitory training are projected by morbid sensitivity, suspicion and delusions of persecution, to such effect that all blame is transferred out of the self-consciousness, which is correspondingly exalted and regarded as grandiosely good.

Besides the chronic fatigue and irritability of the neurasthenic and the compromises of the hysteric, these merergastic disorders include the milder grades of hypochondriasis, which is often

a parergastic disorder, and the anxiety states. Anxiety, in the psychiatric sense, is morbid fear, a symptom experienced from irrational threats to the personality. While it is an important factor in the development of many, if not all, mental disorders, it makes up the symptomatology of one of them. In the anxiety states, the sufferer undergoes obscurely motivated attacks of fear; the symptoms may be attacks of palpitation, perspiration, trembling, intestinal disturbance or indigestion. If the disorder is severe and the attacks recur frequently, or more or less continuously, there may appear physical disorders which are often regarded as medical diseases.

The disastrous social consequences of mental disorders are of inestimable significance. The victims of parergastic (schizophrenic, dementia praecox) disorders alone filled in 1930 more than one half of the 438,000 hospital beds in the United States and comprise one fifth of the annual admittances; 70 percent are between twenty and forty years old when they enter the hospital, where many of them remain under care until they die. The per capita incidence of parergastic disorders in the United States does not appear to differ as between Negroes and whites; they are found among immigrant as well as native white and Mongoloid stock. Statistics are available as to the frequency of these disorders only in European-American countries; the data in the following table, compiled from reports of the International Health Organization of the League of Nations and from other sources, give some suggestion as to the numerical magnitude of the problem.

The proportion of hospital patients suffering from the gravest disorders varies not only from country to country but in different sections of the same state. In general it is higher in urban than in rural communities, and in wealthier than in poorer sections. There is no basis for an accurate estimate of the number of people partially disabled by milder disorders, but there is every reason to believe that in Europe and the United States there are many more such victims than are receiving institutional care.

The treatment that has been developed from environmentalistic and from psychobiological psychiatry comprises immediate and mediate procedures. The former are based on direct contact with the psychiatrist, as in the case of the psychoanalytic, psychocathartic and psychosynthetic techniques, the latter on the utilization of psychiatrically supervised personal environ-

INSTITUTIONS FOR THE MENTALLY DISORDERED IN
TWENTY-SIX COUNTRIES

COUNTRY	YEAR	INSTITUTIONS	ADMISSION	PATIENTS REMAINING AT END OF YEAR
Australia	1929	38	3,471	22,198
Austria	1929	9	8,070	11,504
Belgium	1927	51	—	20,205*
Canada	1930	42	—	26,862
Czechoslovakia	1929	15	9,013	12,047*
Egypt	1929	2	1,651	2,143*
England and Wales	1929	167	21,741	121,208*
Estonia	1928	5	1,758	1,048
Finland	1928	37	3,837	5,290*
Germany	1928	407	—	162,783*
Greece	1929	9	1,351	1,914*
Hungary	1929	6	2,417	2,053*
Italy	1929	147	23,595	64,503
Japan	1929	19	3,420	3,122
Latvia	1929	7	1,533	2,364*
Mexico	1929	4	1,894	1,919*
Netherlands	1929	38	—	21,000*
Norway	1928	23	1,767	5,368*
Poland	1929	23	—	10,575*
Rumania	1929	11	5,262	4,710
Sweden	1929	74	4,693	15,678*
Switzerland	1929	34	—	11,064
Turkey	1929	3	2,184	1,125*
Union of South Africa	1930	11	2,577	10,856
U. S. S. R.	1927	98	—	26,938
United States	1930	561	—	437,919*

* Total beds available; in general, percentage of vacant beds is small.

Source: Compiled chiefly from League of Nations, International Health Organization, *International Health Yearbook*, 1930, 1932.III.2 (Geneva 1932).

ments. The immediate methods are often unavailable to the sufferer largely because of the time required and expense entailed; while, except in child guidance work and some work with delinquents, such as that by Aichorn, the mediate techniques are in the stage of empirical application or scientific exploration. A significant experiment in this direction has been reported from one of the endowed hospitals. Acutely parergastic patients who had undergone rapid development of the psychosis were placed in a situation in which they were encouraged to renew efforts at adjustment with others and in which they were as little discouraged and rebuffed as was consistent with their bodily safety. Besides each other, they encountered only a trained personnel consciously integrated toward encouraging security in interpersonal relations. There are no reliable statistics as to the proportion of parergastic patients whose disorder was originally acute, but it is probably increasing and is perhaps now about one in three. Inasmuch as these disorders often appear in persons from fifteen to twenty-five years of age and fully as

often among superior individuals as among those of inferior intelligence and ability, and since the recovery rate of those promptly hospitalized under ordinarily good care is probably less than 30 percent, this experimental achievement—80 percent social recovery—indicates tentatively that this method of treatment is efficacious. Social recovery here means, however, merely that the patient has regained the capacity to conduct his life without supervision; it does not mean that the underlying warp leading to the psychosis has been remedied completely but implies some degree of increased adaptability and is a prerequisite to more fundamental treatment. Some psychiatrists hold that by definition dementia praecox patients cannot recover; moreover another study in the same hospital suggests that parergastic phenomena of insidious rather than of acute onset are more serious. It is not therefore to be understood that a uniform high rate of improvement can be anticipated from the application of this sort of treatment to all parergastic patients, even if instituted early.

The mediate, socio-psychiatric approach to the gravest disorders of adolescence employed in the experiment described above is the formulated application of long established therapeutic factors. Thus many adolescents are now saved from serious upheavals by the socializing influences of supervised recreational and educational activities, such as those encountered in summer camps. A new type of therapy based on socialization programs within and outside of institutions should reduce the destruction of personality by parergastic disorders to a small part of the current figure and should go far toward alleviating the present burden of minor maladjustments.

HARRY STACK SULLIVAN

See: MENTAL HYGIENE; MENTAL DEFECTIVES; PSYCHIATRY; PSYCHOANALYSIS; PSYCHOLOGY; ABNORMAL PSYCHOLOGY; PERSONALITY; MENTAL TESTS; INSTITUTIONS, PUBLIC; EUGENICS; HEREDITY; INSANITY.

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MENTAL HYGIENE. Although the ancient Greeks anticipated in some respects the principles of modern psychiatric therapy, deliberate concern with a hygiene of the mind dates only from the end of the nineteenth century. For about a century before, the major efforts in the field of mental medicine had been directed toward the elimination of the more intolerable and inhumane features of the treatment afforded those afflicted with mental disorders. Mentally diseased persons had been indiscriminately incarcerated in filthy jails and correctional institutions with criminals and diseased persons; they had been chained, confined by straight jackets, drugged into stupor and flogged. When in 1792 in the midst of the French Revolution Philippe Pinel began his agitation for a more humane treatment of the insane he did so in the face of tremendous opposition not only from the public at large but also from his colleagues in the medical profession. He initiated the reforms by releasing the insane from their chains and by placing them in hospitals. Reforms comparable with those of Pinel were championed in the United States half a century later by Dorothea Dix, who was instrumental in founding no fewer than thirty-two institutions for the care of the insane. Although the New York Hospital had furnished hospital treatment for persons suffering from mental disorders from the day of its opening in 1791, the establishment in 1821 of Bloomingdale Hospital, now the psychiatric division of the former, "for the purpose of ascertaining to what extent the recovery of patients

might be accomplished by moral as well as by purely medical treatment" was a distinct advance in the humane and intelligent care of such patients.

The publication of the studies of hysteria by Breuer and Freud in 1893 (in *Neurologisches Zentralblatt*, vol. ii; tr. in Freud's *Collected Papers*, vol. i, New York 1924, p. 24-41) marked the beginning of a new movement in psychology and psychotherapy which has proved as epoch making in the treatment of the mentally afflicted as Pinel's pioneer endeavors. Psychiatry shared also in the benefits of the general enrichment of the stock of dependable knowledge developed by the scientific research of the nineteenth century in the fields of pathology, bacteriology, chemistry, pharmaco-dynamics, endocrinology and sociology. The problems of mental disease came to be attacked with the same instruments of scientific research as other forms of disease. Heredity, injuries to the nervous system, infection and toxemias of various origins were found to be directly responsible for some forms of mental disorder. Accordingly it became possible to speak with some degree of accuracy of a hygiene of the mind, at least as related to these organically, physically and chemically conditioned mental disorders. Syphilis, alcohol, head injury and the natural changes in the constitution and functioning of the brain which go with advanced age were found to be responsible for the afflictions of at least a third of the inmates of hospitals for the insane. The preventive efforts which the discovery of these specific causes of mental disorder made possible gave rise to the idea of mental hygiene.

The mental hygiene movement (the term was suggested by Adolf Meyer) had its inception in 1908 with the publication of Clifford Whittingham Beers' *A Mind That Found Itself* (rev. ed. New York 1923), a vivid record of the author's experiences as a patient in private and public hospitals for the mentally ill and an eloquent plea for reform and education in the consideration and treatment of the problems of mental diseases. Several months after the publication of his book Beers organized the pioneer Connecticut Society for Mental Hygiene designed to dissipate the prevailing ignorance of the causes of mental diseases. The National Committee for Mental Hygiene was organized during the next year, and by 1929 there were nineteen state mental hygiene societies in the United States and sixteen national societies throughout the world. The International Congress for Mental Hygiene organized

in 1922 held the first International Mental Hygiene Congress in Washington in 1930. The American Foundation for Mental Hygiene was organized in 1928 as a financing agency. The mental hygiene movement has expanded its original objectives to include not only the development of therapeutic procedures to forestall individual maladjustments and of effective treatment and control of the mentally diseased and defective but also the promotion of general social welfare measures, especially in the field of health.

The importance of the problems in the field of mental hygiene is indicated by a glance at the prevalence of mental diseases in the United States. The 1928 hospital census of the American Medical Association showed that one out of every 325 persons in the United States was a patient in an institution for nervous and mental disorders, including patients in institutions for the feeble-minded and the epileptic. There were about 438,000 patients in hospitals for mental diseases in the United States in 1928, maintained at a cost of over \$80,000,000 a year; the hospital population is increasing at the annual rate of approximately 10,000 and about 75,000 new cases are admitted to institutions every year. According to a recent study of mental disease expectancy, in New York state approximately one person out of every twenty-two of the population becomes a patient in a mental hospital at some time during his lifetime. There are more patients in mental hospitals than in all of the general hospitals of the country at any one time, and most mental hospitals are at all times so overcrowded that many new cases are denied admission. As much as one eighth of the total expenditure of some states is for the care of the insane; the burden is always increasing, since as yet under the most favorable circumstances treatment results in not more than 25 to 30 percent of recoveries. Prevention, the objective of the mental hygiene movement, is therefore the only effective way of reducing this burden. Feeble-mindedness also has become a major mental hygiene problem in that it leads directly or indirectly to dependency, delinquency, crime and other social problems; only about 50,000 of the approximately 500,000 feeble-minded in the United States are cared for in proper institutions. Furthermore approximately 400,000 young children in the schools of the United States are so handicapped intellectually and emotionally as to find it extremely difficult or impossible to keep up with the required school tasks and are therefore exposed to maladjustments of various

degrees of severity. The discovery and proper adjustment of these children are now among the most important tasks of the mental hygiene movement. The sponsors of the movement also point to the need for such work to lessen the number of suicides, a large proportion of which can be traced to mental disorders of a preventable type. They also include within the scope of their work the psychiatric treatment of inmates of reformatories and prisons under the hypothesis that the majority of the chronically criminal suffer from some type of mental pathology. They have also been active in vocational and industrial fields, seeking to adjust workers to their jobs.

To discover the actual state of affairs regarding the care and treatment of the mentally handicapped in various communities the National Committee for Mental Hygiene under the direction of Thomas W. Salmon undertook careful surveys of state and county institutions for mental diseases, reformatories and prisons and made a series of clinical studies. The surveys, which were eventually carried out in some thirty states and ten of which had been published by 1927, aroused wide popular interest and were followed in some states by appropriate legislation for the improvement of the lot of the mentally handicapped as regards both more adequate provision for care and improved scientific medical facilities for the study and treatment of individual cases. Of particular significance from a preventive point of view was the promotion of the idea of out-patient and after care activities in connection with the institutions for the mentally handicapped and the encouragement of a closer rapport between the institution and the medical profession of the community. As a result the widespread belief that the mentally ill were beyond all aid has been modified and more patients are coming in contact with the therapeutic facilities at an earlier stage of their maladjustment. The woeful lack of any dependable statistics as revealed by the surveys led to the establishment by the National Committee for Mental Hygiene of a Division on Statistics and Information, which in cooperation with the American Psychiatric Association evolved a uniform system of statistics and classification of diseases for hospitals for the insane, epileptic and feeble-minded; this system has been adopted for annual reports by many institutions and by the federal Census Bureau. In 1928 at the request of the American Public Health Association the National Committee for Mental Hygiene formulated a set of

tentative standards in mental hygiene and drew up a tentative schedule to facilitate the work of state or city officials in planning practical and economical mental hygiene programs. The National Committee also distributes thousands of educational pamphlets and leaflets and has since 1917 published *Mental Hygiene*, a quarterly semiscientific magazine, which has served as the organ of the mental hygiene movement and disseminated its aims among the intelligent laity. It has sponsored lectures before professional, semiprofessional and lay audiences, and through its efforts courses in mental hygiene have been added to the curricula of colleges and schools for the training of social workers and teachers. The profession of the psychiatric social worker came into being largely as the need for his services was revealed by the mental hygiene movement. Since 1928 efforts have been made to improve the teaching of psychiatry in medical schools and clinics, and funds have been gathered for the provision of scholarships in psychiatry for young medical graduates. Accumulated studies of the careers of maladjusted men and women substantiated the opinion long held by students of human conduct in health and disease that the roots of these maladjustments lay in childhood experiences. For this reason the Bureau of Children's Guidance was established under the direction of the New York School for Social Work in 1921 with the financial assistance of the Commonwealth Fund, and child guidance clinics were later founded in many communities in the United States and other countries. In 1928 approximately 40,000 children were served by these clinics in the United States.

In spite of the growth of this movement and its permeation of most fields of human endeavor no adequate audit has as yet been made of the effect of its activities upon human relations. Much has been accomplished in the direction of the original limited objective of improving the lot of the insane; treatment and care have progressed greatly, especially in New York, Massachusetts and Illinois, where institutions for the insane have been transformed into modern hospitals approximating the best standards of the practise of medicine. Progress in the clinical understanding and treatment of the mental patient through the development of psychiatry has contributed a great deal toward shaping the attitude of the community toward its insane and is responsible to a large extent for the present more enlightened procedure. The humanization of the care of the mentally ill may also be attributed in

part to the general march of human progress, although mediaeval attitudes and irrational tabus toward many of the phases and problems of human relations are still prevalent. The active building of prisons, jails, penitentiaries and poor-houses continues and the lives and personalities of countless numbers of children are still being mangled and distorted by improper guidance. Moreover the success of the mental hygiene movement has been limited by the framework of the society within which it works—an economic system which engenders personal crises, maladjustments and frustrations by failing to provide for the masses of the people adequate certainty of employment and sufficient material income. Critics of the mental hygiene movement have contended that in stressing individual adjustment to existing society and in emphasizing the transformation of human nature rather than institutional change in its preventive program the movement is helping to perpetuate the status quo.

Mental hygiene is clearly not merely coextensive with medical practise; it enters the fields of education, social and industrial organization, politics, ethics and philosophy. Even those of its problems which are commonly dealt with in hospitals for the mentally ill require more subtle understanding and treatment than are demanded in the ordinary practise of medicine. When one succeeds in removing all the discoverable toxic factors from the population of a hospital for the insane or in counteracting all the elements of fatigue and exhaustion or in modifying the circulatory disturbances which accompany the organic changes in the cardiovascular system of psychiatric patients, one is still left with the great bulk of the hospital population unaffected therapeutically. What is true of the hospital population applies to a larger extent to the vast number of psychiatric cases with which every community is burdened but which never become sufficiently severe to require hospital attention.

The mental hygiene movement therefore demands that a psychiatrist have a comprehensive knowledge of the human organism and of its functioning in complex personal and social relations past, present and future, objective and subjective; for he must deal with the human personality in its most unruly and wilful aspects, with problems of self-assertion, self-concern and self-protection. He attempts to control and train emotions and fancies that clash with reality. The goal of mental hygiene is ultimately nothing less than the discovery of the means for reshaping

and redirecting human nature. In so far as the movement has been able to function in the prevention of human maladjustment it has been enabled to do so largely because of the contributions of the psychoanalytic school of psychology. Psychoanalysis has emphasized the importance of the social and especially the sexual setting for the shaping and guiding of the newborn through the complex and difficult route from the asocial and amoral state of infancy and early childhood to the state of socialized maturity. It has furnished the means for a revaluation of the meaning for the development of the individual of the traditional institutions of the family, the school-room, the workshop, the playground. It has made possible the differentiation of the manageable from the unmanageable causes of personal maladjustment and pointed the way for those enterprises in child guidance, parental education and educational and vocational reforms which carry the promise of eliminating from childhood and youth at least the more accessible of the impediments to normal growth and functioning. The growth of the adult education movement and the prominent place of subjects concerning mental hygiene in its curriculum promise a more intelligent approach to the problems of the oncoming generation at the hands of its parents and teachers. The extent of the achievement of the mental hygiene movement must be measured largely by its contribution to the promotion of enterprises devoted to the development of wise and capable parenthood. Mental hygiene activity is being directed increasingly toward the provision of opportunities for the normal and healthy to realize their potentialities to the fullest. It is not sufficient that it proclaim its success in terms of provision for the housing and treatment of the insane, defective and delinquent; it must speak in terms of the elimination of the need for these institutions, which are symbols of ignorance, inadequacy and failure.

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See: MENTAL DISORDERS; MENTAL DEFECTIVES; MALADJUSTMENT; PSYCHIATRY; PSYCHOANALYSIS; PSYCHOLOGY; ABNORMAL PSYCHOLOGY; ALIENIST; PUBLIC HEALTH; HEALTH EDUCATION; HOSPITALS AND SANATORIA; CHILD; SEX EDUCATION.

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MENTAL TESTS. The psychologist's attempt to measure "intelligence" by means of tests has in recent years, particularly in the United States, attracted more widespread attention, stimulated more study and research and touched more closely the problems of social science than any other aspect of academic psychology. Not only psychology itself but the fields of education, psychiatry, industry and criminology have felt the effects of the testing movement. Special testing laboratories have been organized; more and more complicated techniques, statistical and experimental, have been elaborated; problems as separate as immigration and the hiring of automobile mechanics have been approached from the tester's point of view. At first uncritical and enthusiastic acceptance of the testing technique in the United States led to an exaggerated view of its importance and applicability. As one by one the previously unsuspected complexities in the problem have been recognized, the attitude of psychologists has gradually become more critical; mental tests are still widely used, but with an increasing realization of the care essential to their proper interpretation.

Before Binet's basic work in mental testing Galton had been concerned with the study of individual differences and had devised a number of tests, largely of sensory discrimination, which he believed might also throw some light on individual differences in intelligence. Cattell in 1890 developed a series of specific tests of a wide variety of sensory and motor abilities. Before 1905 Bourdon, Oehrn under Kraepelin's direction, Münsterberg, Jastrow, Ebbinghaus, Ferrari, Thorndike and others all experimented with tests of individual differences which anticipated methods later used much more systemati-

cally. It remained for Binet with the collaboration of Simon to make the first important practical applications, to introduce new methods of scoring and to combine, modify and organize the tests into the first scale of intelligence. The scale, which appeared in 1905, was devised to meet the practical need of distinguishing the subnormal from the normal children in Paris schools. In the main the tests were meant to apply to judgment, but they included a wide variety of tasks involving memory, sensory discrimination, linguistic ability, understanding of abstract terms and other more or less related abilities. In this scale standards were set up for various age groups; limits were set for idiots, imbeciles and morons; and the concept of mental age was introduced to indicate the level of achievement reached by any child in terms of the average performance of children of that age.

The second Binet-Simon scale, which appeared in 1908, attempted to standardize the tests for different ages by assigning to each year level the tests passed by 75 percent of the children of that age. The authors now also sought to measure the intelligence of normal as well as of subnormal children, but they still regarded their scale as being of greatest service in connection with children of inferior intelligence. While they recognized the importance of environment and educational opportunity as well as of native intelligence in affecting the test results, they supposed that with environment nearly equal even tests of information might differentiate between various levels of intelligence.

The testing movement then took on greater proportions. In 1906 Sante de Sanctis in Rome had published a series of tests for use with feeble-minded children. In 1908 Goddard translated the first Binet-Simon scale into English and introduced it into the United States. In Italy Ferrari in 1908 and Treves and Saffiotti after 1909 used and modified it extensively. In 1910 Katherine Johnston made first use of the scale in England. In Germany Bobertag in 1911 published a version of the 1908 Binet-Simon scale; and in 1912 William Stern, who for a long time had been actively interested in individual differences, introduced the idea of an intelligence quotient (the I.Q.) obtained by division of the subject's mental age by his actual, or chronological, age—an idea which was later adopted by Terman and was used so widely in the United States as to become almost symbolic of the whole mental testing movement. In the United States there were further revisions by Goddard

in 1910 and by Kuhlmann in 1911. Binet and Simon published a slightly revised version of their second scale in 1911, and after considerable application of this new scale Terman and his collaborators in 1916 published the Stanford revision, which is still in use as the most important single instrument in the United States for the testing of intelligence.

There were other revisions and other scales. Yerkes, Bridges and Hardwick in their point scale introduced a new method of scoring in which age groupings were disregarded and the total score was used as an index of level of intelligence. Herring's revision introduced certain variations in scoring and in test arrangement but followed the Binet-Simon scale in essentials. A definite and important departure from the Binet-Simon type of test was made by Pintner and Paterson in their performance scale, which consisted of a series of tests in which the use of language was almost entirely eliminated and problems were to be solved by one or another variety of manual manipulation. This scale was regarded by its authors as especially valuable in the case of children with language handicaps. A somewhat similar scale was used in the United States during the World War as an individual examination for foreign recruits. Performance tests or scales have also been devised by Drever and Collins, Arthur, Ferguson, Porteus, Lipmann, Bogen and Peterson.

Scales which have some features of the performance type have been developed for very young children; the Merrill-Palmer scale is used in the case of preschool children ranging in age from about eighteen to fifty-three months. Two well known series of tests for infants are Gesell's developmental schedule and the Bühler tests. How far these tests measure the sort of aptitude involved in the tests for older children remains to be determined.

In all of these tests and scales the testing is individual, the examiner being concerned with only one subject at a time. In recent years, especially since the World War and particularly in the United States, the development has been in the direction of group tests, in which a large number of individuals can be examined at one time. The use of group tests received its most important stimulus during the war, when the army psychologists attempted to measure the intelligence of more than a million and a half recruits for purposes of determining their capacity for various types of service. Tests known as "army alpha" and "army beta" were used, the

latter a non-language group test for use with illiterates and foreigners. The average score of the drafted men corresponded to a mental age of approximately thirteen years, which was widely misunderstood to mean that the average white American had the mentality of a thirteen-year old child. The more probable explanation is that the average soldier could do no better in these tests than the average school child of thirteen, for the tests, especially the army alpha, had enough in common with school work to give the school child a great advantage over recruits with comparatively little schooling as well as over those who had been out of school for many years. This result has also been taken to mean that intelligence does not develop much beyond the thirteenth year (the limit is sometimes placed at fourteen, occasionally at sixteen or slightly higher), but the highly scholastic nature of the tests and their inability to measure the various possible types of development which adult intelligence may undergo make such a conclusion unwarranted.

Since the war there has appeared an almost bewildering variety of group tests of intelligence, making use of both linguistic and non-linguistic material and ranging from tests for kindergarten children to those for college graduates. One important result has been the collection of a mass of data relating to apparent differences in intelligence between various groups—groups in different occupations, in different parts of the country, of different national origins, of different social levels—from which conclusions hastily drawn and insufficiently established have been widely and uncritically accepted. A large part of the early testing was based upon the assumption that native general intelligence could be measured accurately by the tests. Binet's caution against the use of tests for purposes of comparison when the environment and the background of the subjects differed was to a considerable extent disregarded, and the testers proceeded as if the tests measured native intelligence entirely apart from environmental influences. The fact that lawyers and bank presidents and their children achieved much higher ratings in the tests than did bricklayers and farmers and their children was widely accepted as proof of the innate superiority of the former and as an indication of the correctness of the existing occupational hierarchy. The superiority of white over Negro children and of north European over south and central European immigrants to the United States was regarded as proving beyond

doubt the existence of native race differences in intelligence. The fact that city children were superior to country children was taken to mean that the most intelligent families and stocks had left the country for the city.

Although these opinions are still current to a considerable degree, there is a difference of opinion among psychologists as to whether intelligence as measured by the tests is the cause or the effect of social environment. There has recently been an increasing emphasis upon the importance of social factors, at least in connection with group differences, and a growing realization of the part that culture in the widest sense may play in determining the results. The more obvious factors, such as familiarity with the language in which the test is given and the amount of formal schooling of the subjects, are usually recognized and the attempt is made to keep them constant as far as possible. The superiority of urban over rural schools can clearly account for much of the difference between rural and urban children; proof of a selective migration on the basis of intelligence has so far not been given. There are, however, more subtle cultural differences, in attitudes toward the test situation and the examiner and in habits of thought and speech, which may affect intelligence test results considerably, especially as far as racial differences are concerned, and which have for the most part been entirely neglected. The emphasis on speed, for example, which is an important factor in most tests of intelligence, may unduly penalize rural as compared with urban children and does not take into account attitudes of peoples not subject to the spirit of individual competition which the test situation postulates, and which is at least in part a creation of our particular economic system.

Cultural factors may enter more subtly and more specifically. A southern Negro child can hardly be expected to know (as in one well known intelligence test) that "silence must prevail in churches and libraries," when all the churches which he has attended are obvious witnesses to the contrary. A reservation Indian will hardly realize that "schools are important because of the preparation they give for later life," when he can clearly see that there is no connection between the school he attends and his later life. The tests are tests of intelligence, if at all, only within the restricted sphere of the culture in which they have originated. Our particular culture is one which stresses, at least in theory, the more abstract linguistic abilities; our concept

of intelligence is by no means applicable without change to other groups and other cultures, which have their own legitimate criteria of achievement.

Within our own culture there are also direct indications of the part which the social environment may play in determining intelligence test results. Freeman and others have shown that when the environment of foster children is improved markedly, there is a distinct improvement also in their test scores; it follows that the environment, at least in part, creates differences in intelligence and that the occupational differences in intelligence test scores cannot be taken to prove that the most intelligent people are necessarily to be found in the upper classes. The great overlapping of abilities between the various social groups and the fact that so little is known about the inheritance of intelligence within any one group should impose considerable caution in connection with any such conclusion. It has been shown further that when children of a supposedly inferior race, for example, the Negro, are tested in a relatively favorable environment like New York City, they do very much better than Negro children in the south; in a recent study by Peterson and Lanier Negro children in New York obtained results equal to those of white children. The results obtained by the tests of the army psychologists also showed a marked superiority of northern over southern Negroes as well as a superiority of the Negroes in several of the northern states over the whites in several of the states in the south. The argument that these facts can be explained on the basis of a selective migration of the most intelligent Negroes from the south to the north and that the change in environment is therefore not responsible for the difference between the two groups has been refuted by recent studies at Columbia University, which have failed to reveal any selective factor of this kind and have, on the other hand, demonstrated a definite tendency for the test scores of Negro children to improve proportionately to the length of time they have lived in the more favorable environment.

The question of the superiority of the Nordic, or north European, over other European peoples has also been approached from the standpoint of mental tests. The differences noted by the army psychologists in the test results of recruits from the various European countries were interpreted to indicate a racial hierarchy of intelligence, the descending order being Nordic, Alpine, Mediterranean. This finding and its interpretation were hailed by many racial theorists in the United

States as a welcome corroboration of their view that the future of the country depended upon the numerical predominance of the tall blond dolichocephalic north European and upon a restricted immigration from central and southern Europe. While this view still has considerable popular currency, it is no longer held as tenable by psychologists. Brigham and others who played an important role in spreading the evidence for Nordic superiority now insist that the test results cannot possibly be used to support such a position. A recent study made in Europe by Klineberg revealed no consistent superiority of any one European physical type over another.

The comparison of children of various national and racial groups is complicated by possible differences in rate of growth and in age of biological maturity. If races differ in their rate of physiological development and if there is any correspondence between physiological and psychological maturation, the direct comparison of the test results of twelve-year old girls of two different races can scarcely be justified. The many studies of the relation between mental and physical development have so far yielded mainly negative results; even when the correlation between physical and psychological indices has been positive, it has almost always been too low to be significant. Nevertheless, it is quite possible that the technique of correlation which is usually employed is not applicable to the type of relation which exists. Careful follow up studies of individual cases from both the physical and psychological sides are needed before the problem can definitely be solved. As far as races are concerned, the assumption of a difference in the age of biological maturity is still open to question. There are marked differences within the same racial group when the social and economic status differs (the well to do group maturing more quickly than the underprivileged group); until these factors are adequately controlled no conclusion as to race differences in the age of biological maturity can be justified. There are, however, differences in the age of biological maturity of various groups, whether according to race or social class or geographic location; and this fact introduces a possible complicating factor in comparisons of group differences in intelligence.

Sex differences in test performance appear to be negligible; as the tests were standardized on girls and boys alike, this result was perhaps to be expected. There seems, however, to be a tendency for girls to excel in those tests in which

linguistic factors predominate and boys in those in which mechanical or mathematical abilities are involved. Dependent children have usually given a low average; but as their environment has usually also been defective, the results are difficult to interpret. Delinquent children have usually although by no means consistently shown low results; delinquent adults have as a rule shown little deviation from the non-delinquent average. Deaf and blind children generally rank low, even when appropriate changes have been made in the testing technique.

The widely accepted belief in the hereditary group differences in intelligence which the test results have seemed to demonstrate must for the present be regarded as unproved. If intellectual differences between racial and social groups do exist (and this point is still debatable) the testing technique is nevertheless incapable of proving their existence. Within the same or nearly the same social and economic stratum, however, where presumably comparable social and educational factors have been at work, there are marked individual differences which can best be explained on the assumption of unequal intellectual endowment. This endowment as measured by the tests appears to be distributed according to the normal (Gaussian) probability curve, most of the results falling at or near the midpoint, with a gradual and symmetrical decrease in numbers as the best and the poorest scores in the distribution are approached. The common belief is that the position of an individual in this distribution is relatively constant ("constancy of the I.Q."). But the I.Q. is constant only if the accompanying conditions also remain constant. If there are marked social, educational or economic changes in the subject's status or significant changes in his health and his personality, the I.Q. may likewise change considerably. This has been demonstrated in the case of southern Negro children who have migrated to New York.

The tests can in most cases be relied upon to distinguish subnormal from normal children, although there is danger of a wrong diagnosis when tests are administered without sufficient experience and when examiners fail to take account of attitudes, of previous backgrounds and of factors of character and personality which may markedly affect the results. The mental test can safely be used only as one instrument among others in a diagnosis of mental defect, but as such it has proved itself useful in educational and psychiatric practise. In education the men-

tal test can be of greatest value in those cases in which the school achievement falls far below what can reasonably be expected from the child on the basis of his test performance; individual analysis and guidance may then bring about an improvement. Unfortunately, however, the mass testing in American schools has on the whole paid little heed to the special problems of the individual child. In connection with the very superior child mental tests have been used in many schools in order to separate out those children who could presumably bear a heavier and more advanced schedule. Recent attempts to apply the technique of mental testing to the problem of genius and even to assign I.Q.'s to the greatest historical figures on the basis of what is known of their earliest achievements are examples of the unscientific exaggeration to which the preoccupation with mental tests may lead. To identify genius with a high I.Q. is a most misleading oversimplification. Mental tests have been used also as part of the requirements for entrance into a great many colleges in the United States. Their similarity in general character to the kind of test which the student meets in his college work makes them probably fair instruments of selection in most cases; they are unfair, however, to the student who has already begun to develop along highly specialized lines, and to whom many of the problems raised by the tests have not the slightest interest. Here too the exceptional individual is often neglected in the mechanical handling of a large number of cases.

The most important achievement to the credit of mental tests, their most significant improvement over the judgment of intelligence by means of mere observation, lies in their relative objectivity. An acceptable test must give approximately the same result in the hands of two different examiners or in the hands of the same examiner on two different occasions; otherwise it cannot be regarded as reliable. Moreover a valid mental test must correspond very closely with other criteria of intelligence, such as school grades or degree of success in other directions, and with the judgment of those who are well acquainted with the subjects being tested. The reliability of the tests in actual use is usually very high, but their validity is often very low. Correlations with teachers' estimates and with school and college grades are fairly low. Correlations with educational tests are usually high, but educational tests in their construction as well as in their content are often so similar to mental tests

that a high correlation between the two means little. It is pertinent to ask whether the intelligence tests really test intelligence. To assume that "intelligence is what the intelligence tests test," as one psychologist more or less seriously expressed it, is an admitted evasion of an issue which although perhaps never entirely lost sight of in academic circles has often been comfortably disregarded by those who are interested only in practical applications.

The question of the existence or non-existence of a "general intelligence" which can be tested and measured has been answered in the affirmative by Spearman, who maintains on the basis of mathematical evidence that in the measurement of any ability there enter two independent factors, one the "general factor," and the other the "specific factor" (or factors), which varies within the individual from one ability to another. Thorndike believes that individuals differ not in the kind or amount of any general mental energy but in the number of physiological connections in the central nervous system; the highest intellect differs from the lowest only in the capacity for having more of these connections. Thomson has suggested that the number of factors which enter into an activity like a mental test are samples of all those which the individual possesses. Kelley and more recently Garrett, Brigham and others have accumulated statistical evidence of a "multiple factor" theory of intelligence; a number of more or less general or group factors, such as linguistic ability, mechanical ability and memory, are thought to make their relatively independent contribution to "general intelligence." This view, which appears to be gaining ground in academic circles, is supported by the relatively low correlations between the so-called abstract linguistic and the concrete non-linguistic, or performance, type of mental test; both types purport to measure general intelligence, but it is highly probable that something quite different is being measured in the two cases. In the light of these findings it is doubtful whether one ought to make any use whatever of the concept of general intelligence.

The usual criticism of intelligence tests to the effect that they measure only one aspect of the total personality and therefore only one factor entering into the later success or failure of the subject has been fully recognized by most mental testers. The frequent discrepancy, for example, between intelligence test results and the academic success of college students has been explained on the basis that study habits, interest,

motivation, persistence, emotional qualities as well as intelligence all play an important part which the intelligence test as such makes no attempt to evaluate. In recent years the attempt has been made, especially in the United States, to develop tests which will measure non-intellectual instead of purely intellectual traits. The Downey will-temperament test, the Moss social intelligence test, Moore's test of aggressiveness, Hartshorne and May's studies in deceit, the Allport ascendance submission study, the Pressey cross out tests, Henning's tests of cooperation and the many personal inventories and rating scales are among the most important in this field. These tests have not been sufficiently standardized to permit of their use for scientific purposes, and their validity and reliability are for the most part far below those of the usual mental test.

Tests of special abilities as distinct from general intelligence have been used widely in vocational guidance and in industrial psychology. Of the special aptitude tests the Seashore music tests and the Stenquist tests of mechanical aptitude are the best known. In addition a large number of vocational tests have been developed in psychotechnical laboratories in various countries. Tests for automobile chauffeurs, for mechanics, draftsmen, telephone operators, telegraphers, typists, bookkeepers and others have been found to be of value, although usually only in combination with other indications of special ability. It is probable that tests of special aptitude will retain their place in industry and that the measurement of specific rather than general abilities will be the more permanent contribution of the mental testing movement.

In general it may be said that the mental test has a definite although limited application. With all its defects it marks a step in advance of the more or less haphazard subjective judgments of a child's intelligence which are often used in its stead. When used in combination with other criteria and in the hands of a careful examiner who is prepared to give due weight to the qualitative as well as the purely quantitative aspects of the performance, it may be of real value in education, in psychiatry and in vocational guidance. The individual test, which is more troublesome to administer but which makes qualitative observation possible, is therefore to be preferred to the group test. The mental test presents the subject with a problem to be solved, and the subject's manner of approach to the problem as well as his success or failure in the solution may

often give the examiner valuable information. The greatest dangers lie in the mechanization of the technique and of the interpretation, in the undue stress which is often laid upon the purely quantitative aspects and in the failure to appreciate all of the social and cultural factors that enter into the result.

OTTO KLINEBERG

See: PSYCHOLOGY; EDUCATIONAL PSYCHOLOGY; CHILD PSYCHOLOGY; CHILD; JUVENILE DELINQUENCY AND JUVENILE COURTS; VOCATIONAL GUIDANCE; ABNORMAL PSYCHOLOGY; PSYCHIATRY; MENTAL DEFECTIVES; MENTAL DISORDERS; MENTAL HYGIENE; PERSONALITY; GENIUS; HEREDITY; ENVIRONMENTALISM; RACE.

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MERCANTILE CREDIT is that form of credit which is used in financing the movement of merchandise from the producer to the retailer or the industrial consumer. It includes sales of goods on time by one merchant to another as well as time transactions among producers themselves and sales on credit by producers to middlemen. It is not essential that the goods be resold by the purchaser in the same state or even in changed form. Credit extended by a manufacturer or distributor when machinery, equipment and supplies are sold to an industrial consumer is mercantile credit, even though the machinery thus purchased is resold but indirectly through the addition to the price of the finished product of an amount covering its depreciation and obsolescence.

While it is true that mercantile credit was used to some extent as far back as the days of Roman domination, its most rapid development did not commence until the establishment of fairs and other periodical markets in Europe and Asia. During the thirteenth, fourteenth and fifteenth centuries the bulk of European commerce was transacted at fairs. At these points there gathered large numbers of merchants and artisans for the purpose of buying or selling com-

modities of various descriptions, while many other people gravitated to such places primarily for amusement. The fairs of Nizhni Novgorod and Kiev in Russia, Lyons in France, Senigallia in Italy and Kiakhta in Mongolia became established institutions and were known to traders everywhere. The fairs were found to be convenient places for making payments or for settling obligations incurred at the fair or on previous occasions, and it became common practise to make bills of exchange payable at the various fairs, which were held at intervals of from three to twelve months. In fact the process of making "payments" occupied such an important position that at some fairs most of the time was devoted to it and a few fairs specialized in that function alone; as, for example, those of Novi, Italy, which were held four times a year almost exclusively for the purpose of adjusting accounts.

A considerable amount of the business transacted at the fairs involved a credit period of from three to six months, for which bills of exchange were drawn and made payable at a specified fair. Instead of actual settlement in cash bills of exchange were offered by holders to their creditors and if accepted by the latter the debts were wiped out. To the fair merchants brought their books, called *bilans*, which showed the debits and credits, and offered to their creditors some of the debtors who owed them money of a like amount. Upon acceptance the substitution was duly entered in the *bilan* and the process of making payments proceeded until all obligations were settled; only small balances were actually paid in cash. This practise of setting off mutual debts doubtless gave rise later to the establishment of clearing houses for banking purposes; it also facilitated the use of circulating credit as a medium of exchange.

Gradually mercantile credit grew in importance until it became a dominant feature in some lines of business. Institutions specializing in such credit came into existence, as exemplified by the rise of the factor in England. The factors in the woolen industry dominated and abused their position to such an extent that in 1695 Parliament passed an act intended to curb some of their activities. The normal procedure in the woolen industry was for the wool merchant to sell the wool through the factor to the maker of cloth, who turned the finished goods over to the factor for sale to the draper. According to the act of 1695 the factor was required to obtain promissory notes from the draper when goods

were sold to him and the draper was obligated under penalty to give such notes. The maturity of the notes was limited to six months, and they were to be transferred to the maker of cloth, who in turn would use them as cash in payment for wool purchases. On promise to sell their goods first factors made the cloth producers forego their demand for notes from the drapers, at the same time extending to the drapers longer terms than could possibly be given by the cloth makers. The factors then offered to finance the cloth makers in their purchases of wool and in their sales to drapers on long time credits, both at very high rates.

With the rise of the factory system of production the wholesaler became the foremost channel for the distribution of goods. One of the major functions of the wholesaler has been to finance the manufacturer when such help was needed and to extend credit to his customers. So long as manufacturers operated on a small scale and were weak financially, wholesalers occupied an almost monopolistic position through their extension of credit to the former. But as manufacturers came to accumulate adequate capital, their dependence upon the wholesalers for financial assistance was greatly diminished. The development of department stores, mail order houses, chain stores and other forms of large scale retailing had a similar effect upon the wholesaler. The great bulk of the retailers, however, still depend largely upon the wholesaler's financial aid.

During the first half of the nineteenth century the mercantile credit system of the United States was based in the main on the promissory note and the trade acceptance. Toward the latter part of the century the open book account came into prominence with the offer of cash discounts to stimulate payment in advance of the date due. This has been regarded in many quarters as an undesirable change, and attempts have been made to restore the trade acceptance, on the theory that it is a superior credit instrument inasmuch as it shows on its face that it has arisen out of a commercial or trade transaction and has been accepted by the drawee, who thus acknowledges his indebtedness. Trade acceptances may be readily discounted at banks, since such double name paper is said to minimize the risk involved. By discounting the acceptance the seller secures immediate possession of funds from the sale of his goods, thus increasing his capital turnover and reducing the cost of his business. The trade acceptance also eliminates

the problem of the taking of unearned discounts by customers, is held to result in a smaller percentage of returned goods and by reducing the use of open book accounts presumably places credit on a higher plane. When signed by strong acceptors (and sometimes by one or more subsequent endorsers), trade acceptances are said to be an ideal commercial paper for open market dealings. In addition to being dealt in by bankers, they can also be used by merchants for temporary investment of idle funds.

Accordingly in 1915 the Federal Reserve Board under the authority of sections 13 and 14 of the Federal Reserve Act encouraged the use of trade acceptances by establishing a discount rate on such acceptances "somewhat lower than that applicable to other commercial paper." The Federal Reserve Board and Banks have since made efforts to further the use of trade acceptances and to develop what they regard as a high class double name paper. During the World War the trade acceptance movement was sponsored as a device for mobilizing commercial credit and as a result there was created the American Trade Acceptance Council, which was to carry on an educational campaign in the interest of the trade acceptance; in 1919 this council was reorganized as the American Acceptance Council and its scope was widened to include bank acceptances.

Efforts to popularize the trade acceptance have thus far met with indifferent success. In the first place, the trade acceptance is not adapted to transactions involving short periods of time or to lines of trade in which purchases are made at frequent intervals and in relatively small amounts. It has therefore never been popular in the grocery trade and in other lines of business where credit is extended for not more than approximately thirty days and where customers have what may be termed "running accounts." Moreover it is frequently impossible for a buyer to know in advance whether he can take the cash discount or whether he will have to take the full credit period allowed by the terms. Finally, the use of the trade acceptance tends to convert discounting customers into buyers by acceptance, which results in a lengthening of the credit period. While trade acceptances are quite common in Europe, their use in the United States is greatly limited because of the cash discount system which prevails in this country and is little used abroad. So long as the cash discount system predominates, trade acceptances, which are given by buyers, who necessarily take the net

terms, must represent inferior credit risks. Trade acceptances may be a good substitute for net terms alone under certain conditions and may also be used successfully as a means of forcing dilatory buyers to pay their bills promptly rather than as a medium of revolutionizing commercial credit. Among some of the other important instruments now in use in the United States in connection with mercantile credit are promissory notes, checks, drafts of all kinds including bills of exchange and commercial letters of credit.

Mercantile credit is closely related to bank credit; the vast number of credit instruments created by mercantile credit become the feeders for bank credit. The purchaser of goods for resale either pays cash for his goods or buys on time. To obtain the cash with which to pay immediately or with which to take the cash discount he frequently borrows at his bank on his own promissory note. Should he desire to refrain from making payment until the date it falls due, it behooves the seller to carry the financial burden, which he in turn may transfer to his bank either by giving his own promissory notes or by discounting the notes or acceptances secured from his customers. In either event much of the mercantile or commercial credit is translated ultimately into bank credit. Inasmuch, however, as local banks are reluctant to accept large quantities of single name paper or to make loans on accounts receivable, sellers frequently must obtain the necessary capital through the sale of securities, through borrowings in the open market or through the sale of open book accounts to special institutions, such as discount companies, finance companies, or to factors operating in the textile and cotton trades.

The larger the amount of commercial paper the greater the circulating medium of exchange, as is evidenced by bank deposits and by paper money issued on that basis. The velocity of circulation is greatly increased when such paper is eligible for rediscount at the Federal Reserve Banks; this accounts to some extent for the revival of interest in the trade acceptance, aimed at the conversion of open book accounts into "closed" accounts, during the period of depression which set in during the latter part of 1929.

The terms under which mercantile credit is extended in the various trades are well established; they are fixed by custom, contract or rule of the respective trade associations. Terms of sale usually involve the length of the net credit period, the size of the cash discount, if

any, and the time when it may be taken. They relate also to the type of credit instruments which must be given by the purchaser and the conditions thereof. A number of factors influence the length of the credit period as well as the size of the discount given by sellers to their customers; among these are the nature of the goods involved, whether they are seasonal in character, staples or specialties and whether they are finished goods intended for the ultimate consumer or raw materials, semimanufactures, machinery, equipment, or supplies intended for industrial consumption. Other factors are competitive conditions, the margin of profit involved, the nature of the credit risk, sectional or geographical conditions and the position of the business cycle.

At first the responsibility for the management of both the credit dispensing and the collection functions in the mercantile field devolved upon the head of the business enterprise. As the business grew the credit making power was delegated to the bookkeeper. Customers no longer came under the personal observation of the proprietor. With further expansion in the number of customer accounts credit granting powers were turned over to officials in responsible positions. Thus there evolved the office of credit manager, whose principal functions are to keep losses down to a minimum and to maintain sales at the highest level possible. The performance of these functions became more and more complex with the increase in population, the expansion of credit business, the multiplication of laws governing it and the intensification of competition. Adequate technical training in credit management in addition to a broad knowledge of business and economic fundamentals is now becoming indispensable to scientific management of mercantile credit, and credit management is rapidly acquiring the status of a profession.

The first problem in credit management involves the proper selection of credit risks. To judge a prospect's willingness and ability to pay and to secure additional information in revising active accounts there have come into being a number of agencies and organizations whose major purpose is to collect and disseminate credit information. Among the oldest agencies were R. G. Dun & Company and the Bradstreet Company. The former was established in 1841 following the crisis of 1837, the causes of which were found to have been deeply rooted in the haphazard granting of credit to merchants. It was organized by Lewis Tappan, a New York

silk merchant whose jobbing house failed during the depression following the crisis of 1837 and who saw a possibility of capitalizing on the records which he had gathered for some time concerning his customers' credit standing. In 1859 the company passed entirely into the hands of R. G. Dun & Company. The foundation for the Bradstreet Company was laid in 1849 by John M. Bradstreet, a Cincinnati attorney, who gathered much information concerning debtors and creditors of a large insolvent estate for which he acted as assignee. With this information as a basis he founded Bradstreet's Improved Commercial Agency, which was incorporated in 1876 as the Bradstreet Company. The agencies operated many offices throughout the United States, Canada, Mexico and Cuba and maintained subsidiary companies in England, France, Belgium and throughout central and northern Europe. The principal functions of these companies were the publication of rating or reference books, the issuing of special reports upon the request of subscribers and the supplying of derogatory information to all interested subscribers. Both concerns published business magazines containing vital information concerning the state of business and compiled statistics on commercial failures and their causes. They engaged also in other educational and research activities, as, for example, Bradstreet's index of prices. In February, 1933, the Bradstreet Company was acquired by R. G. Dun & Company, becoming Dun & Bradstreet, Incorporated.

In addition to the general mercantile agencies there are a large number of specialized institutions which limit their activities to one or a few lines of trade or concentrate upon a small geographic area. They are either privately owned or cooperative in nature and maintained by trade associations. Some of them, particularly the mutual or cooperatively owned agencies, collect and disseminate only ledger data. Others operate along much the same lines as do Dun and Bradstreet's, while still others perform special functions, as in the case of the Credit Clearing House, which has established what is known as a "credit checking service" actually rendering decisions as to whether an order should be accepted or declined.

Sellers secure much valuable information concerning customers and prospects through direct interchange among themselves. Special trade groups have been organized in most cities for the purpose of exchanging credit information at meetings held periodically under the auspices of

the local associations of credit men. Many trade associations maintain credit bureaus which either give complete ledger data on credit risks or supply the names of creditors for direct clearance by the inquirer. Much credit information can be obtained also from miscellaneous sources, such as corporation manuals, corporation rating books, trade and financial publications, and from the creditor's own records. The personal interview with the prospect or customer affords an additional means of obtaining valuable credit data.

One of the most valuable sources of credit information is that afforded by the Credit Interchange bureaus maintained on a non-profit basis by a number of local associations of credit men under the general supervision and management of the National Association of Credit Men organized in 1896. It has at the present time 137 local associations with approximately 22,000 members from among the leading manufacturers, wholesalers and bankers of the United States. The general purpose of the organization is to improve credit standards and practises for the general welfare of business. This purpose is accomplished through two general types of activity. The first comprises all activities looking toward the general improvement of credit and business standards and includes the promotion of such federal legislation as the Bankruptcy Act and the Federal Reserve Act and of such state legislation as the Bad Check Law and the Bulk Sales Laws as well as educational work through publications and credit surveys. Under the auspices of its Credit Institute courses are provided for those engaged in credit work. The second type of activity has a more immediate and direct bearing upon profit making and covers the work of the various service departments of the association. The Credit Interchange Bureau department, which initiated its activities in 1919, provides a nation wide interindustrial exchange of ledger information showing the actual and current record of paying habits of purchasers. Sixty individual credit exchange bureaus, headed by the central bureau in St. Louis, are now maintained in this system. The Adjustment and Collection Bureau department of the National Association of Credit Men, operating 72 local adjustment and collection bureaus, offers a service national in scope with a personnel experienced in the handling of collections and in liquidating failing businesses in which creditors are involved. A Credit Group Department is maintained which through the organization of

both local and national credit groups within specific industries fosters the discussion of credit problems of mutual interest. The Business Service Department of the association deals with the rehabilitation of financially embarrassed businesses which are worthy of such assistance, while the Fraud Prevention Department cooperates with the Department of Justice in prosecuting commercial crooks and in combating fraud.

In foreign trade the extension of mercantile credit is well nigh indispensable. Even the cast iron rule of some American manufacturers who insist on "cash against documents in New York" (CAD-NY) terms involves credit and risk. The degree of willingness of exporters to grant credit and the liberality in terms to a large extent determine the amount of business secured at the expense of exporters from competing countries. Foreign credit extensions, however, are hazardous unless exporters are fully prepared to handle business on that basis.

Among the factors which have added to the obstacles in mercantile credit in foreign trade are the difficulty in securing reliable and adequate credit information concerning foreign customers; the distance separating the accounts from the exporter; inadequate banking facilities in some of the countries through which drafts may be presented for payment or acceptance or which can be used for letter of credit arrangements and as a source of credit information; the complications involved in attempts to obtain redress in foreign courts; the high cost of enforcing payment; unfavorable exchange regulations; and lack of knowledge of the ever changing and inadequate commercial laws of foreign countries. Finally, the time normally extended on foreign transactions is usually much longer than that in domestic trade. Prior to the World War, for example, the drafts drawn by German exporters on their South American customers matured in from three to twelve months and on customers in Asia Minor in from four to nine months. The documentary drafts which form the bulk of payments through London banks are generally drawn for two to four months. Even in the sale of goods by United States exporters to customers in Great Britain the terms are anywhere from one to three months, while for similar types of merchandise sold to domestic customers they are considerably shorter. A still longer extension of credit on the part of the exporter is necessary when foreign customers are located in agrarian countries. No payments can be expected in many cases until the importer

receives payments from his customers, who in turn depend upon the results of the harvest. As countries become more industrialized and the income of importers is less intermittent and irregular, greater facilities may be expected for the handling of mercantile credit in foreign trade.

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See: CREDIT; BANKING, COMMERCIAL; EXPORT CREDITS; CREDIT INSURANCE; FINANCIAL STATEMENTS; MARKETING; WHOLESALING; FAIRS.

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MERCANTILISM, originally a term of opprobrium, lacks the clear cut meaning of an expression coined for purely scientific purposes. Used sporadically by the French physiocrats, the term was brought into general currency through Adam Smith, who devoted about one fourth of *The Wealth of Nations* to a relentless criticism of what he termed "the commercial or mercantile system." His attack started with the views of money which he attributed to the mercantilist writers; but the greater part of his discussion referred to commercial policy and consequently treated mercantilism as a system of protection. More than a century later in 1884 a greatly different use of the word was introduced by Gustav Schmoller in his essay, *Das Mercantilsystem in seiner historischen Bedeutung*. In Schmoller's opinion mercantilism was essentially a policy of economic unity—to a large extent independent of particular economic tenets—expressing the efforts of territorial princes, German in the first place, to overcome the disruption caused by mediaeval conditions. In England at about the same time William Cunningham in *The Growth of English Industry and Commerce* (1882) viewed mercantilism still dif-

ferently as the expression of a striving after economic power for political purposes manifesting itself particularly in England. The discordance between these views was principally due to a confusion between the ends and means of economic policy; each of them pointed to something of fundamental importance in the development of economic activities and ideas in the period between the Middle Ages and the industrial revolution.

If one considers mercantilism first as a system of national economic unity, it is quite clear that there was an enormous task awaiting the rulers of most continental states at the end of the Middle Ages. Under feudalism independent petty rulers and even quite ordinary private landowners had usurped the power of the state, harassing and impeding trade and industry and laying both under contribution for their own benefit. Among the numerous manifestations of this tendency the most important was perhaps the almost endless confusion caused throughout Europe by tolls on rivers and highways as well as by the impediments placed on trade between different provinces. An English chronicler, William Wykes, speaking of conditions in the late thirteenth century referred to *furiosa teutoniorum insania*, "the wild madness of the Germans"; but the condition was quite as widespread in France. On all the great rivers there were separate tolls for each ten or at most fifteen kilometers, which the trader had to pay in succession. The work of unification necessitated the doing away with all this and the creation of national customs systems.

In England, where very little of this confusion had ever existed, unification was achieved in the course of the thirteenth century; but on the continent progress was slow and very little was accomplished before the nineteenth century. By far the most important success was scored by Colbert in France through his tariff of 1664. This tariff did away with most of the duties separating from one another the provinces constituting the so-called *cinq grosses fermes*; something like three eighths of the French monarchy was thus made into a single customs territory. But this was in respect only of interprovincial customs. With regard to river and highway tolls Colbert was able to achieve very little; and the customs boundaries between the rest of the provinces he left entirely untouched, with the result that areas conquered about the middle of the sixteenth century were treated as foreign territory from a customs point of view until the

French Revolution. Nevertheless, the French tariff of 1664 was almost the only important measure in the direction of customs unification carried out under mercantilism, although Colbert for one was quite aware of the connection between the work of unification and mercantilist aims in the fields of money, foreign trade and colonization.

Throughout this period the towns had a well thought out and surprisingly consistent policy, which also tended to split up the unity of a state's territory. Each town attempted to subject the adjacent countryside to its control and to hamper in every possible way the trade of competing towns. Mercantilist policy involved the substitution of a scheme which would give the whole territory the benefits that each town had tried to arrogate to itself. The direction of town policy need not necessarily be changed, but its scope must be enlarged from a municipal to a national field.

One such victory of national policy is to be recorded in the famous act of Queen Elizabeth of England—or of her minister William Cecil, Lord Burghley—the Statute of Artificers . . . and Apprentices (1562). Besides Colbert's unifying tariff of 1664 it is perhaps the only successful achievement of mercantilism in the field of economic unity. Based upon legislation which went back to the Black Death, it created a consistent national system of regulation of internal trade and industry in town and country alike, which lasted on paper until the early nineteenth century (1813–14). The positive importance of this measure consisted in its national scope. There was nothing in it favoring the towns at the expense of the countryside, and it did nothing to perpetuate the craft guilds, the typical products of town policy and economy. The guilds were thus prevented from becoming a component part of the trade regulatory system, a circumstance which contributed to weakening the hold of the mediaeval order. Otherwise the factors working for economic change had little relation to mercantilist measures, in England as in other countries. The statesmen of later Tudor and earlier Stuart times made unusually successful attempts to revive the old system of regulation, but that very fact worked in the direction of undermining it when the parliamentary party became victorious.

The importance of this development becomes clear when the French parallel is studied. For in France mercantilism accepted and tried to nationalize the mediaeval system. By the edicts

of 1581, 1597 and 1673 the guilds were made compulsory throughout the country even outside the towns; and although these measures came far from achieving their purpose, the whole mediaeval system of regulation was given through them a new and wider lease of life. At the same time the craft guilds remained as exclusively local as they had ever been, so that labor and industry were prevented from flowing freely between the different parts of the country. This was probably one of the reasons why the industrial revolution began in England instead of France. French mercantilism saw the rise of a very extensive civil service engaged in industrial as well as other types of supervision, while England had not even the semblance of such a body. The famous *règlements*, issued at an ever increasing rate from the time of Colbert onward, all perpetuated the mediaeval treatment of industry. A great deal was thus achieved in the perfecting of production on the old lines; but the development of the characteristic aspect of modern industry, mass production for mass consumption, was hampered rather than furthered through the most effective and consistent forms of mercantilist regulation.

The situation was somewhat different in the field of international trade and business organization in general. On the double foundation of private partnerships, mostly of Italian origin, and mediaeval merchant guilds there arose a network of new business corporations, of which the English were more important for later developments, although the Dutch were at one time more powerful. The distinguishing feature of the so-called regulated companies in England which proved so remarkably successful in Atlantic, Mediterranean and Baltic trade was that each merchant traded for himself, although under the rules of the company and with the use of its organization. These chartered companies paved the way for the joint stock company, the direct ancestor of the most important of all modern forms of business organization, the corporation. For the history of mercantilism the important question is to what extent these developments were due to mercantilist policy. In Portugal, Spain and France the chartered companies and the organization of foreign trade and colonization in general were the outcome of state initiative; but in Holland and England, the two important countries in this field, the trading companies were created by private merchants. The state confined itself to giving them more or less extensive privileges, for which they

often had to pay dearly, one of which was the preventing of others from use of the more advanced joint stock form of organization. In 1719 the English Parliament passed the Bubble Act, which was intended to check a general growth of company organization and may have achieved at least part of its object. Altogether it is far from clear that the remarkable development of company organization was to any great extent due to mercantilist policy in those countries where it was most important.

The results of mercantilist activity in overcoming the disruption caused by mediaeval conditions were thus rather limited. The *laissez faire* era may even be considered its executor in this respect. Through the influence of the French Revolution in other countries as well as in France and through the rise of new ideas in the field of economic policy the end of the eighteenth and the first half of the nineteenth century saw changes introduced without much difficulty for which mercantilist statesmen had been striving in vain for several hundred years.

But efforts in the direction of economic unity were only the frame of mercantilist policy. The next question must be, for what purposes mercantilist statesmen wanted to use the resources of a unified state. The answer is, principally for strengthening the powers of the state in its competition with other states. While the mediaeval conception of the object of human effort was the salvation of human souls and while economic liberalism, or *laissez faire*, aimed at the temporal welfare of individuals, mercantilist statesmen and writers saw in the subjects of the state means to an end, and the end was the power of the state itself. The foremost exponent of this aspect of mercantilism was Colbert; but he had counterparts everywhere. The British navigation laws as well as the old colonial system were its most lasting results. Combined with a static view of economic life this doctrine was responsible for the perpetual commercial wars of the later seventeenth and the eighteenth century, culminating in Napoleon's Continental System and the British Orders in Council of 1807. For if power was the object of economic policy and if the total fund of economic power was given once for all, the only method of benefiting one's own country was to take something away from someone else. Nobody has pointed this out with greater logical incisiveness than Colbert; and, conversely, David Hume in his criticism of mercantilism turned against just this "jealousy of trade."

It soon becomes clear, however, that the characteristic features of this policy resulted less from the striving after power in itself than from the views of its exponents as to the proper means for attaining power or prosperity. Only at this point do we reach the real economic import of mercantilism, what constitutes it an economic tenet and what reveals the fundamental differences between mercantilists and their predecessors as well as their successors. Adam Smith, for example, was entirely in accord with mercantilist aims when he wrote that "defence is of much greater importance than opulence"; the only difference was that he laid much less stress than earlier writers upon that aspect of the problem. The extent to which mercantilists and laissez faire economists were in agreement with regard to ends is suggested by a comparison of the title of Adam Smith's famous work with that of the most important book belonging to German mercantilistic literature, the *Politischer Discurs von den eigentlichen Ursachen des Auf- und Abnehmens der Städte, Länder und Republiken*, by Johann Joachim Becher (Frankfort 1668, 2nd ed. 1673). Only slight shades of meaning distinguish this title from that of the bible of laissez faire. But in their view of the relations between means and ends two books could hardly be more unlike. There lies the most distinctive feature of mercantilism.

The mercantilist conception of what was to a country's advantage centered on two closely allied aspects of economic life—the supply of commodities and of money. These doctrines are best considered separately.

It was possible to regard commodities in a purely neutral way as something to be bought or sold and neither in preference. This was the merchant's point of view; as a German author (Laspeyres) has well said with regard to the Dutch: "The merchant was a free trader in every direction; he wanted no limitation of exports, in order to send out large quantities of goods; no obstacles to imports, in order to take in large quantities; finally no hampering of transit trade, in order both to import and export large quantities." This was what might be called the staple policy of the mediaeval towns, developed first in Italy and Germany, that of drawing trade in both directions to the town itself and away from all competitors. A late but important outcome of this was the old colonial system making the metropolis an *entrepôt* of colonial trade, an idea which culminated in the British Orders in Council of 1807. Important as this

tendency was during many centuries of European history it could, however, never triumph completely as it appealed only to a small minority in every community. Instead two other and entirely opposing views came in succession to dominate commercial policy.

The prevalent mediaeval idea had been that a community should aim at the securing of plenty, as Francis Bacon pointed out in his *History of Henry VII* in saying that that monarch was "bowing the ancient policy of this estate from the consideration of plenty to the consideration of power." The result was the setting up of obstacles to exports and the facilitating of imports. Throughout the Middle Ages export prohibitions were innumerable in most countries, while import prohibitions were very scarce. Commercial treaties aimed at securing imports, exports being granted as a favor; in one case it was even required that goods manufactured from raw materials set free for export should be sent back.

It was in criticisms of the prevalence of export prohibitions that the new attitude which was to become typical of mercantilism first found utterance. In *A Discourse of the Common Weal of This Realm of England* (1581; ed. by E. Lammond, Cambridge, Eng. 1893), probably written in 1549 by John Hales, one of the most intelligent of mercantilist writers, it was shown at some length and quite clearly how the prevention of exports counteracts its own aim through hampering the production of the commodities in question, while free exports would result in increased production. Mercantilist thought here showed an advance over mediaeval ideas in its ability to take a long view and to disprove the belief that consumers profit by everything which creates momentary plenty. The same trend of thought appears in a well known sentence by Thomas Mun, in *England's Treasure by Foreign Trade* (reprinted Oxford 1928), written about the end of the 1620's and published posthumously in 1664. Referring to export of bullion he writes: "For if we only behold the actions of the husbandman in the seed-time, when he casteth away much good corn into the ground, we will rather accompt him a mad man than a husbandman; but when we consider his labours in the harvest, which is the end of his endeavours, we find the worth and plentiful encrease of his actions." This view of economic life reappeared in the nineteenth century in the teachings of Friedrich List as well as in the "infant industry argument" of John Stuart Mill.

But it did not in itself mean a changed attitude toward the supply of commodities. Mercantilists went much further, however, turning against "a dead stock called plenty," not only for the moment but for the long run period. They came to look upon a plentiful supply of commodities within a country with as great disfavor as mediaeval statesmen had regarded a depletion of commodities. The great object became to *décharger le royaume de ses marchandises*, stimulating exports and hampering imports by every conceivable means. Only thus was a country believed to become "rich"; Sir William Petty characteristically wrote in 1662, and Sir Josiah Child repeated a few years later, that Ireland, "exporting more than it imports, doth yet grow poorer to a paradox"—the opposite result was considered the only natural one. According to this view production must be stimulated to the utmost, but products kept out and sent away. The most difficult problem was the relative treatment of the different factors of production. A natural solution was to retain goods in accordance with their importance to production or with their character as raw materials; but these points of view were very largely discordant and a consistent policy was therefore impossible. On the other hand, it was possible to find a solution with regard to one of the prerequisites of production; namely, labor, as that was not "produced." The result was encouragement of population increase, of child labor and of low wages as a method of stimulating production and increasing the competing power of a country.

It goes without saying that the mercantilist treatment of the supply of commodities was not the outcome of theoretical speculation, although such speculation later developed. How far back the policy of hampering imports went it is difficult to say, but the first known traces of the new policy date from the beginning of the thirteenth century in the towns of north Italy, especially Venice. It passed to the Netherlands about the middle of the following century and to France and England a century later, Edward IV being perhaps the first English ruler wholeheartedly to embrace protection.

Mercantilism in the sense of a policy and doctrine of protection represents the most original contribution of the period in question to economic policy and the one which has retained more sway over men's minds than any other. Various causes contributed to this great change from mediaeval ideas; the most influential apparently was the growing importance of money

economy. So long as commodities were mostly exchanged against one another, it was clear to the meanest capacities that nothing could be gained by receiving little in exchange for what you gave away but quite the reverse. When, however, all exchange transactions were overlaid by the cloak of money, the workings of economic life became infinitely more difficult to understand; and then it was easy to believe that commodities were a nuisance and a danger, especially as a cause of unemployment. Although this view was first held with regard to manufactures it spread over the whole economic field, in England coming from a comparatively early date to embrace even food products. As a money economy still survives, it is natural that the mercantilist view of commodities should also have survived when the rest of mercantilism lost its influence, although the ruthless consistency of *laissez faire* obliterated this too for a short time from men's minds.

So far no mention has been made of the mercantilist views of money. In the opinion of Adam Smith and his followers, however, the real gist of mercantilist doctrine was expressed in the statement "that wealth consists in money, or in gold and silver." From this point of view mercantilist insistence upon an excess of exports over imports—the flow of bullion and money omitted from consideration—was explained as inability to distinguish between money and wealth. It is easy to find in mercantilist literature and state papers an almost unlimited number of utterances supporting that interpretation. But the fact that in recent times the policy of protection has retained or regained its sway, although little is now heard about the necessity for an inflow of precious metals, indicates that protection is the more fundamental tenet. In the mercantilistic period, however, the two cooperated harmoniously.

The differences between an earlier and a later policy with regard to exports of money have led to the drawing of a distinction between bullionists (*q.v.*) and mercantilists proper. The former wanted to prohibit the outflow of bullion, while the latter brought forward a theory of the balance of trade and saw in an excess of exports over imports of commodities the only possible means of increasing the monetary stock of a country without mines of precious metals. The distinction was certainly important not only for economic policy but perhaps even more as an expression of a general concept of society; but it is also true that both schools were in agree-

ment as to the benefits of a large stock of money. Such a view is indeed very old; what mercantilism did was to bring the rest of economic policy into harmony with it and to elaborate many ingenious although usually mistaken theories to fortify it. The mercantilist theory of money was elaborated principally by a host of English writers in the seventeenth century, foremost among whom were Thomas Mun, Sir William Petty, Sir Josiah Child, John Locke and Charles Davenant; outside England there were few besides Bernardo Davanzati, Antonio Serra and Jean Bodin, the German writers contributing little of an original character in this field.

It is of course a travesty of the real opinion of these writers to say with Adam Smith that they identified wealth—an income—with money; but they very often expressed themselves as if they did so, and that also is of importance. Otherwise their reasoning is as a rule easy to follow, which does not mean that it is correct. Believing that consumption in itself was of no value they came by easy strides to the conclusion that only an excess of income over expenditure increased the riches of a country and that such an excess could consist only in an inflow of precious metals from abroad. Locke is perhaps more suggestive than any other writer on that point. From this followed naturally insistence upon an increased stock of money even by writers who could not explain to what use the money should be put or those who, like Petty, even believed in the possibility of a superabundance of money.

Most mercantilist writers and statesmen, however, insisted in the first place upon the use of money in circulation; this was in harmony with their general eagerness for trade and commerce, movement and exchange. Although the old ideal of cheapness, which was closely allied to that of plenty, held sway for a long time and perhaps never entirely lost its influence, most mercantilists were at heart inflationists. So far their eagerness for increased circulation was a foregone conclusion; for some form of the quantity theory of money was very widely held. One writer, Samuel Fortrey, found a happy expression for this aspect of mercantilism when he said in 1663: "It might be wished, nothing were cheap amongst us but onely money." This view paved the way for the plausible theories of John Law (1705) and for paper money mercantilism generally. That new departure was in strict accordance with the fundamental tenets of the school but unexpected in its results, since under

a paper money regime the precious metals would lose their specific importance and much of the theoretical foundation of mercantilist commercial policy disappear. Belief in the benefits of a rapid circulation was strengthened by arguments to the effect that countries with low prices would have to "sell cheap and buy dear." In the hands of Law, who in this as in other respects could fall back upon Locke, this was elaborated into the doctrine that a plentiful supply of money within a country created a favorable rate of exchange. Almost the only writer showing a clear conception of the fact that rapid circulation by increasing prices became an obstacle to exports was Mun; but he did not follow out the conclusions, which would of course have been subversive of the whole body of mercantilist doctrine.

Lastly, mercantilism implied a general view of society, a fact which is often overlooked. This general attitude was closely akin to that of the successors of the mercantilists, the *laissez faire* philosophers, in almost all other respects their opposites. Both followed the general trend of modern opinion, replacing religious and moral considerations by belief in unalterable laws of social causation—a rationalism often accompanied by a strictly non-moral and non-humanitarian view of social life. The mercantilists were in agreement with *laissez faire* philosophers not only in basing their reasoning upon natural law; there are many likenesses as well as marked dissimilarities between the views of the two schools as to general social psychology, for example, between Petty and Hobbes on one side and Bentham on the other.

It is especially noticeable that mercantilist statesmen and writers believed in what was called "freedom of trade," or "free trade"; the utterances of Colbert to that effect are innumerable and in most cases quite seriously meant; sometimes it was even said that all interference with economic life should be avoided. How could mercantilists arrive at their practical measures from such premises? Certainly there is much inconsistency to be accounted for, but their fundamental view is quite clear. Unlike the *laissez faire* economists they did not base their advocacy of free trade and non-interference with economic life on the existence of a preestablished self-operating harmony. What they meant was that interference should aim at changing causes and not effects, that it was useless to punish unavoidable results without removing their causes. As a paradoxical but very typical mercantilist,

Bernard Mandeville, wrote in 1714: "Private vices, by the dextrous management of a skilful politician may be turned into public benefits." The contempt of the mercantilists for religion and ethics, their desire to subject individuals to the state, their belief in a somewhat mechanical social causation without belief in a preestablished harmony, made them even more ruthless in their insistence upon setting aside all sorts of time honored customs and human needs and presented a strong contrast to the fundamentally humanitarian attitudes which followed. Moreover in this respect as in most others the ability of mercantilist statesmen to achieve what was required by their programs was very limited; and their attempts at directing economic life without violence remained mostly on paper. In practise they had recourse to almost all the time honored methods of coercion.

Generally it may be said that mercantilism is of greater interest for what it attempted than for what it achieved. It certainly paved the way for its successors, and the discussions which went on throughout the seventeenth and the early eighteenth century eventually bore fruit, although chiefly through the criticisms they called forth. Great change in the society which mercantilist statesmen had taken over from the Middle Ages did not occur; that was reserved for their successors.

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See: CAMERALISM; BULLIONISTS; BALANCE OF TRADE; PROTECTION; COLONIAL SYSTEM; CHARTERED COMPANIES; COLONIES; ACTS OF TRADE, BRITISH; CONTINENTAL SYSTEM; GUILDS; LABOURERS, STATUTES OF; TRANSIT DUTIES; EXPORT DUTIES; MERCHANT MARINE; INTERNATIONAL TRADE; MONEY; NATIONAL WEALTH; ECONOMIC POLICY; NATIONALISM; UNIFICATION; NATIONAL ECONOMIC PLANNING.

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MERCENARY TROOPS. Professional soldiers, willing to undertake military service in exchange for payment in money, kind or land, were a common feature even of the earliest civilizations. Although there have been at all stages of history warlike overpopulated groups, such as the Greeks, the Celts, the Germans and at a later date the Swiss and the Bohemians, who have offered themselves as mercenaries in service abroad, it is the restless nomadic tribes of Asia and northern Africa which have contributed most significantly to the spread of a professional soldiery. Repeated invasions by wandering armies forced the early Asiatic and African centers of culture—unheroic civilizations disinclined to strenuous military service—to rely on trained military bands hired abroad. In China the caste armies of the ephemeral overlords were bolstered with a permanent body of mercenary troops. In Egypt the defense of the existing political and religious structure was entrusted primarily to the mercenaries rather than to the intermittently summoned militia. The successive empires in Mesopotamia relied on mercenaries supplemented by a feudal and popular army, while the mercenary troops of the Persian satraps counterbalanced the feudal army of the native kings.

The later evolution of the mercenary system has been determined in the main by three sets of forces. These forces were powerful enough to transplant the system even into Europe, which by reason of its comparative immunity from nomadic invasions as well as of the more intense

and popular character of its warfare was less congenial to military hirelings. The first of these determining forces was the political complexion of the state. While democratic forms and traditions have given rise as a rule to militias, absolutism has invariably tended to support itself by mercenary troops. The foreign guards of the pharaohs, the Germanic guards of the Roman emperors and the Swiss regiments in Bourbon France were varying manifestations of the same autocratic technique.

A second determining force has been the economic character of the state. Commercial cities like Tyre, Sidon, Syracuse, Tarentum and Carthage were drawn inevitably to the mercenary system. Carthage engrossed in commercial pursuits acquired wealth enough to purchase the military resources of Africa and half of Europe and to exploit them under the supervision of native Carthaginians. There arose powerful military dynasties, such as Mago and the Barcas, which transmitted prerogative and prestige from father to son. In the hands of men like Hannibal the mercenary system resulted in a military science of the highest order. Later commercial nations repeated the process: Venice, the German Hanseatic League and the commercial cities of Holland. The essentially mercenary character of the English army may similarly be attributed, in spite of a frequent overemphasis of the militia tradition, to the preoccupation of the nation with commercial pursuits.

A third determining force has been the presence of a cultural antipathy to military service accompanied by a general reluctance to jeopardize the advantages of civilized life by a recession to materialistic conflict. This spirit may manifest itself not only in periods of decadence and overrefinement but also at times of widespread spiritual or intellectual exaltation. The aversion to political aggressiveness and war has often been accentuated by the fact that the military program conflicts with the economic interests of the masses of the people in both rural and urban districts. Such periods of general popular indifference have as a rule tended to introduce a regime of mercenary troops.

The actual operation of these three forces has varied greatly according to the particular historical context. In Greece conditions conducive to the emergence of the mercenary system manifested themselves as early as the fifth century. In Sparta the economic resources of the agrarian population were exhausted by perpetual wars. The transition came about the time of the Pelo-

ponnesian War, and from the fourth century on mercenaries played an increasingly predominant role in the life of the city-state. As soon as Athens became an imperialistic commercial state it realized that a citizen militia was incapable of meeting the new demands and after the middle of the fifth century relied upon a permanent mercenary army. Since the confederate states had the option of paying their military obligations in money, large funds became available for recruiting purposes and facilitated the replacement of the citizen militia by paid troops. Other Greek city-states were for similar reasons driven in the same direction, and the process was accelerated by the growing reliance of the Greek tyrants on mercenaries. The mercenary units, recruited at first from native Greeks, were later manned with colonials and finally with barbarians and constituted eventually a far reaching system conducted by private entrepreneurs.

The same process began to repeat itself in Macedonia during the latter half of the fourth century. But as Alexander the Great extended his political ambitions to Asia and as the nation kingdom changed into a world autocracy, his citizen army was transformed not into a private mercenary enterprise, as was the case in southern Greece, but into a public machine directly under the control of the state, the forerunner of the standing army of the Diadochi. A similar development took place in Italy and in Rome during the third century B.C. Inasmuch as the Italic confederates assumed part of the military burdens, it was possible for the Romans to preserve a national army over a longer period than was the case in Greece. But the losses in men, the long duration of the Second Punic War, and the imperialistic policy brought about an acute form of cultural cleavage. Imperialism gradually transformed the national militia into a standing mercenary army. Only the heavy infantry of the legions was drawn from native conscripts, and even there levies were replaced under Marius by private recruiting. The civil wars and the empire completed the transition. In the standing mercenary army of Augustus Roman soldiers were completely replaced by aliens.

In the barter economy of late antiquity and the early Middle Ages remuneration of mercenaries was changed from payment in money to payment in kind, except in Byzantium, where the recruiting of soldiers became a flourishing business in the hands of private entrepreneurs. From the latter part of the eleventh century private mercenaries began to appear also in the

west. The displacement of the feudal soldiery was furthered by the crusades, by the spread of money economy and by the introduction of long range weapons; by the thirteenth century there had come into existence formally organized units, such as the mercenary troop of the French kings, the Brabançons of Barbarossa, the Saracens of Frederick II, the English mercenary knights and the privately organized bands of the *condottieri* in Italy. The end of the Middle Ages witnessed the appearance of the Swiss and of the German lansquenets, private foot mercenaries equipped with the new close range weapons which ushered in a new method of warfare more adapted to the needs of the modern state. The development was especially rapid in France, where the earliest standing mercenary troops were *bandes de Picardie* and the *compagnies d'ordonnance* organized on the Burgundian model. As the revolution spread to other states, the feudal military system gradually disappeared.

With the modern age a new mercenary period began. From the end of the fifteenth century to the end of the seventeenth military Europe relied almost exclusively on private mercenaries. Entrepreneurs like Pizarro, Cortés, Mansfeld and Wallenstein were commissioned by the state to organize temporary armies for colonial and domestic purposes. The exploits of the Swiss, the lansquenets, the German reiters, the Spanish infantry, the pikemen and the musketeers constitute the highest achievement of the mercenary system. The colonial wars of the seventeenth and eighteenth centuries, especially the wars in America, rendered mercenary armies more and more indispensable.

By the end of the seventeenth century European states had become sufficiently powerful to supervise directly the organization of their armies and to bring the mercenary troops under state control. Training and drilling began to go hand in hand. Temporary private mercenaries became transformed into the drilled standing armies of the absolute state. The house of Orange took the lead in effecting this transformation and paved the way for the Bourbon military system of the eighteenth century and the military reforms of Frederick the Great. The recruiting of hired troops from the native population was accompanied during this period by all the evils of corruption, deceit and violence. The more common practise of recruiting from alien populations was furthered by the mercantilist tendency to utilize natives for economic activities at home and by the fact that there were

numerous small principalities which were eager to sell their mercenaries abroad. During the American War of Independence, for example, England found no difficulty in making such contracts with Brunswick, Hesse-Cassel, Waldeck-Ansbach and Zerbst, which together supplied the British army with 30,000 soldiers, in return for which they received about £8,000,000.

Besides the pure mercenary type there appeared certain mixed forms, such as the French militia system of Louis XIV and the Prussian cantonal system, which tried to incorporate militia features as well. These mixed systems led gradually to a nationalization of mercenary armies and enabled the nation states, which sprang up in the period following the French Revolution, to replace mercenaries by conscript citizen armies. After some initial setbacks universal military service succeeded during the last three decades of the nineteenth century in completely replacing mercenaries. In modern national armies the system of mercenaries has shrunk to the corps of commissioned and non-commissioned officers. Only countries with great external security, such as England and the United States, have found it possible to place their chief reliance on native mercenary armies, although mercenary troops recruited abroad are still useful for colonial purposes. Of late a greater professionalization of armies has become necessary because of the growth of technology and the increasing complexity of warfare. A professional soldiery designed for home defense seems again to prepare the road for a new national mercenary army.

The legal and political status of mercenaries has varied at different periods. Often mercenaries have formed separate independent bodies which either acquired the status of alien units in the national life, as was the case with private mercenaries, or became integral parts of the state, as happened with national standing armies. Groups such as the Mamelukes and the Janizaries were castelike organizations with special privileges and responsibilities, which in many cases descended from generation to generation. All matters pertaining to salaries, maintenance and discipline were minutely regulated by a complicated administrative apparatus. In Rome the independent administrative process was exemplified by the organization of the praetorians and later by that of the various military units of the Germanic invaders; in the Middle Ages by the Norman mercenaries who were employed in the service of Russia and Byzantium and by

Saracen troops, which were more than once hired by Christian rulers. A peculiar type of organization was exhibited by the Almogars, who were active in Italy and in the East at the end of the thirteenth century. The Italian *condottieri* created the so-called *compagnie di ventura*, specially privileged units which played an active role in the establishment and administration of the mediaeval city-states of Italy. In France there arose during the early Middle Ages such self-sufficient private organizations as the Grande Compagnie, the Société de l'Aquese and later the savage *cameraderies* or the Armagnacs.

The Swiss organizations represent a particularly important variant of the administrative machinery. For economic reasons the state itself assumed in Switzerland the task of providing its citizens with military employment abroad. The right to recruit became a state monopoly. The various cantons made contracts with foreign states regulating the recruiting and delivery of troops. The units were organized on a local basis; each had its own constitution, officers and banners. Contracts were concluded with Austria, Burgundia, Milan, Venice, the Holy See, Spain, Savoy, Württemberg, Holland and above all with France, where most of the Swiss mercenary bands were hired. It was only in 1848 that a federal law was adopted forbidding the cantons to enter into such military agreements.

The Swiss units served as a model for the famous German mercenary organizations, the so-called lansquenets (*Landsknechte*), which originated in upper Germany under the direction of the emperor Maximilian I. The lansquenets were associations composed of foot soldiers recruited both from noblemen and from townspeople and peasants. The task of recruiting was assigned by a war lord to a colonel; the colonel engaged his lieutenant colonel and captains, who decided upon ensigns and opened recruiting. Their statutes were strictly regulated. The muster was followed by a recitation of the military articles, an administration of oaths and an installation of the officers who had been elected by vote of the rank and file. In democratic as well as in more authoritarian administrative systems the maintenance of discipline among the wandering mercenaries was one of the most difficult problems and often led to serious mutinies. Italy and France as well as Carthage and Rome at an earlier period were repeatedly menaced by mercenary wars and from time to time in periods of weak central government overrun by greedy mercenary bands.

The progress of military art in ancient and modern times may be attributed in large part to the mercenary system. It determined the nature of strategic warfare and stimulated technical and tactical innovations, giving to war an independent status and a capacity for development. The creation of the empires of the ancient world could have been achieved only through mercenaries, who became formidable instruments of destructive strategy. In Europe likewise it was only through mercenaries that the limited scope of the mediaeval wars was overcome. The private mercenary armies of modern Europe proved excellently adapted to the new tactics of exhaustion. They made war an economic enterprise and a source of gain. To support war by war became a principle. War remained an economic enterprise even at the time when mercenaries became state armies. The highly trained armies of the mercenary period were difficult to replace—a consideration which dictated to a considerable degree the strategy and tactics of warfare.

Public opinion in nearly all periods has shown itself hostile to the mercenary. In Greece the *miles gloriosus* was an object of bitter ridicule. In the last years of Rome mercenaries were branded like horses. The social position of the non-knightly soldiers was very low also in the Middle Ages. Frederick Barbarossa and Louis VII made an agreement not to tolerate such rabble anywhere in their dominions, and the third Lateran Council promulgated the heaviest church penalties for mercenaries as well as for Christians in general who declined to combat the mercenary evil. The disappearance of private mercenaries after the horrors of the Thirty Years' War and the wars of Louis XIV was a significant reflection of public opinion. But as the servile soldiers of the state mercenary armies became an organic part of the state organization, they became with the growth of humanitarianism objects of paternalistic government.

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See: ARMY; WAR; WARFARE; CONSCRIPTION; MILITIA; MILITARY TRAINING; MILITARISM; PRAETORIANISM; MILITARY DESERTION.

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MERCHANT MARINE. The close association of shipping interests and government policy may be traced back to the period when mercantile and carrying functions were but parts of one general operation and were controlled by the same commercial interest. Ancient and mediaeval traders who engaged extensively in overseas commerce usually owned the vessels which carried their goods. While they often transported for others they employed their vessels primarily in their own trade. The ownership of merchant vessels was thus looked upon as an inevitable accompaniment of any considerable water borne commerce. Furthermore in cities like Venice and Genoa and in the towns of the Hanseatic League vessels engaged in overseas trade were an important part of the community's capital, and as such their increase and protection were vital objects of state policy.

The spirit of nationalism which spread over Europe during the sixteenth, seventeenth and eighteenth centuries was characterized by a broader and more inclusive trade policy than had prevailed in the smaller maritime city-states of ancient and mediaeval times. This policy, known on its economic side as mercantilism, was shaped to meet the real or supposed needs of a nation's industries. Shipping was one of several industries requiring the fostering care of national authority. The theory that national wealth is increased by promoting exports and limiting imports had as a corollary the principle that goods imported into a country or exported therefrom should go as far as possible in vessels flying the national flag. The Navigation Act of 1651, passed under Cromwell, provided among other things that all products "of the growth, production, or manufacture of Asia, Africa, or America, or any part thereof . . . as well as of English plantation as others" should be imported into England or its territories only in British built and British manned vessels. As

late as 1847 no produce of Asia, Africa or America could be imported for consumption into the United Kingdom by way of continental Europe, the purpose being to make such trade direct and to confine it to British bottoms. The coasting trade of the United Kingdom was also restricted to British ships, and the colonial trade was prohibited to all foreign vessels except under sanction of special orders in council.

The navigation acts of Great Britain as well as similar regulatory measures passed in other maritime countries show the persistence of the idea that a merchant marine is vital to national commercial interests. The spirit of *laissez faire*, however, which spread over Europe during the first half of the nineteenth century was gradually undermining not only tariff barriers but also old shipping laws. An act passed in 1849 repealed the British navigation laws subject to certain reservations. In 1854 a law was passed admitting foreign vessels to the coasting trade of the United Kingdom. Nevertheless, English law still provides that a ship shall not be deemed a British ship unless owned wholly by British subjects or by an incorporated body established in some part of the British dominions. According to the Alien Restriction (Amendment) Act passed in 1919 no alien may act as master or as one of the principal officers of a British ship.

While mercantilistic ideas still survive, other motives have played a larger role in modern national policy for the building up of merchant shipping. Naval needs prompted governmental encouragement of merchant shipping as a means for supplying transports and auxiliary cruisers in time of war and as a training school for seamen in time of peace. Subsidies were often conditioned upon the operation of vessels built according to naval specifications or approved by naval authority. This association of ocean transportation and naval needs became especially marked as leading nations acquired overseas possessions or established "spheres of influence" in the Orient, Africa and other relatively remote regions. The growth of capitalist imperialism during the last half century has also called for the development of national shipping. This imperialism while sometimes showing itself in military conquest, as in the Spanish-American and Boer wars, has been the outcome primarily of an industrial technique demanding extensive markets and new sources of raw material. The development of trade lines along ocean routes to remote markets and sources of needed raw materials has become in several instances under eco-

conomic pressure a matter of governmental concern. Where such outlying regions have become colonial possessions, the establishment of regular and frequent communication generally becomes a matter of political policy.

Among other aims which have figured prominently in modern governmental aids to shipping has been the effort to provide an adequate and speedy mail service to and from foreign countries. This effort while often partly political and imperialistic in nature is also a matter of social convenience and service. The promotion of a general oversea trade is also one of the ends sought in shipping subsidies. It is a prevalent impression among business men and politicians that the national flag on a ship advertises a country and its products and that therefore commerce may be promoted by aiding national shipping. Countries, like Great Britain, dependent upon foreign lands and oversea possessions for food supplies and other materials, have a vital interest in the maintenance of a national merchant marine which can be relied upon to keep the lanes of traffic and communication open for their goods.

The forms adopted by modern governments to aid national shipping have undergone material changes. Prohibitions against the transportation of imported or exported goods in foreign bottoms have long since disappeared. Through various reciprocal treaties discriminatory import duties favoring products carried in national vessels and discriminations in tonnage dues have practically ceased to exist. Attempts to revive such discriminatory practises in France in 1872 and 1873 and in the United States in the Merchant Marine Act of 1920 were failures. While England and some other countries have opened their coastwise trade to foreign vessels, the United States and most maritime nations of continental Europe reserve their inland or coastwise commerce to their own ships. Aside from the policy of reserving coastwise trade to national vessels governmental aid now usually takes the forms of periodical money payments, exemptions from import duties on shipbuilding materials, construction and navigation loans to shipbuilders and operators and sales of government built ships at nominal prices. Although the last two forms have figured prominently since the World War, the first is the most important. Periodical money payments to shipbuilders and operators have been in the nature of subsidies or subventions.

— Where a government makes payment to a

shipping concern conditional upon the regular performance of some public function, such as carrying the mail between specified ports at a given rate of speed, the payment is usually known as a subvention. Most subventions at the present time are mail, although some are admiralty, naval and intercolonial. Where a government subsidizes national shipbuilding and ship operation in general, subject only to the meeting of certain broad requirements, the payments are known as construction and navigation bounties. Shipping and shipbuilding bounties have become less prevalent since the close of the World War, a period in which economic conditions have made it difficult for the shipping industry to finance its own development. During the struggle great material losses of tonnage had been suffered. In attempting to reestablish normal trade relations the industry faced at the same time a deficiency in vessel tonnage and an increasing demand for fast service. As a result the rapidity of development of line service has been disproportionate to the private capital available, and in consequence there has been much dependence upon government credit or government loans. The United States, France, Italy, Sweden, Japan, Spain and other countries have officially adopted maritime credit schemes.

Mail subventions have become the typical form of government aid to shipping to which the term subsidy is applied. Where such payments cover only the extra costs involved in the services demanded by the government they are properly termed subventions. Frequently, however, they cover more and are therefore subsidies in the true sense of the word. Governments sometimes contract to pay carriers regardless of their nationality for special transportation services: such payments are of course in no real sense a subsidy to a home or national industry. Among maritime countries, however, a ship subsidy or subvention is generally designed to aid a national form of transportation as well as to secure certain desired services and is therefore limited to carriers flying the national flag.

Shipping subsidies are ordinarily intended to perform for the national mercantile marine the function performed by a protective tariff for other industries whose products meet more or less foreign competition. As the protective tariff is designed to enable domestic producers to compete successfully with their foreign rivals in the home market, so shipping subsidies are granted to improve the competitive position of water carriers flying the national flag on the high seas.

The purpose is to keep at least a part of the world's shipping industry at home; that is, under the national flag.

The effectiveness of shipping subsidies may be considered from two standpoints: the development of special and needed services and the building up of a national merchant marine. Governments are often constrained to offer inducements to steamship companies in order to secure a transportation service otherwise unobtainable. For example, payments for the regular carriage of mail over a given route at a certain average minimum rate of speed and with a given number of sailings per year may be sufficient to obtain the service desired, and there is no reason to question the effectiveness of such payments in most instances. With regard to the promotion of a national merchant marine the effectiveness of direct financial aid is more debatable. Where a subsidy takes the form of a subvention or subsidy to a special company, it is questionable whether other steamship concerns whose vessels fly the same flag are indirectly benefited, as has been contended by some authorities. Steamship lines which have grown up in the wake of some subsidized line have developed because trade conditions have favored their growth and not because a government aided service paved the way. The subsidies granted by the British government to the Cunard Line, for example, were not an indirect cause of the early development of the White Star Line, which for a long time received no government aid. In pre-war Germany the North German Lloyd, which received a moderate subvention from the imperial government for certain services, was outstripped by the Hamburg-American Line, which received no such aid. Furthermore the countries which adopted the policy of paying general bounties often show a relatively limited development of mercantile shipping. In pre-war times the German merchant marine, which received little direct aid from the government, far outstripped the heavily subsidized shipping of France, as did also the Norwegian mercantile fleet, which received practically no financial assistance from the government aside from certain subventions granted to the coastal service. In other words, a country's merchant marine depends fundamentally on industrial and commercial conditions.

The fleets of Great Britain, the United States, Japan, Germany, Norway, France, Italy and Holland constitute about 80 percent of the world's total tonnage. Sweden, Greece, Spain and Denmark also have large merchant fleets.

England pays regular shipping subsidies, as do most of the other maritime countries. Direct bounties were granted for short periods in the reigns of Elizabeth, James I and some later sovereigns. These early bounties as well as certain other financial aids had naval ends in view and were for the most part spasmodic rather than regular in character. In the nineteenth century the policy of aiding the British merchant marine on the high seas assumed the forms of mail and admiralty subsidies, one of the first of which was a postal subvention to the Peninsular Company (later the Peninsular and Oriental Company) in 1837. In 1838-39 postal subventions were granted to Samuel Cunard by the Board of Admiralty for the transportation of British mail between Liverpool and certain North American ports. The transatlantic services of the Cunard Company were gradually enlarged, accompanying increases in the subsidies paid by the government.

The British government has continued the policy of granting direct financial aid to merchant shipping, but this aid has been conditioned upon the performance of some public service and has been limited to a small number of companies with whom special contracts have been made. While these payments have assumed the form of subventions, they were often actually subsidies in their earlier developments. Later monetary grants, however, have been little if any more than necessary to cover the cost of the service rendered and have consisted almost entirely of postal, admiralty and colonial subventions. For the year 1930-31 the budget estimates for the mail contract services of the British government amounted to £820,570 (\$3,993,300).

During the World War British shipping suffered a direct war loss of 7,759,000 gross tons, or 38 percent of the tonnage under the British flag in June, 1914. As a result of a construction program to make good this loss the British government acquired a considerable fleet. It soon disposed of its ships, however, and left to private enterprise the task of further repairing the damages wrought by war. The British government and the government of Northern Ireland under the Trade Facilities Acts passed between 1921 and 1926 guarantee loans to shipping and shipbuilding concerns. Under these laws loans approximating £85,707,000 (\$417,093,115) have been guaranteed by the government.

Trade conditions have favored British shipping. The postal and other subventions as well as the recent governmental guaranties just men-

tioned affect but a small part of the British merchant marine. The position of Great Britain among the maritime countries of the world is due primarily to economic causes, not to any governmental policy of a protective nature.

Several of the British dominions also subsidize their merchant fleets. The Australian government pays mail subsidies partly on a fixed payment basis, partly by weight. The Navigation Act of 1912 as amended in 1920 confines the coastal trade to ships which meet strict governmental regulations. The Canadian government encourages shipping by subsidy and otherwise as part of a general national transportation system, which includes also the railroads. About 68 percent of the power driven fleet exclusive of the Great Lakes fleet is owned directly or controlled by the two great railroad groups, the privately owned Canadian Pacific and the publicly owned Canadian National Railways. The Canadian coastal trade is confined to Canadian or British ships. Postal subsidies and navigation bounties appropriated by the government amounted in 1932 to \$1,052,220. The government of New Zealand has paid postal subventions since 1869. Exemption from port dues is also used to aid shipping. There are no restrictions on the coastal trade except that ships so engaged must fulfil the requirements of the New Zealand Shipping and Seaman Act of 1908.

From colonial times to the Civil War, barring occasional setbacks, the American merchant marine played a prominent role in international trade. Shipbuilding and ship operating costs were low, largely because of the abundance of standing timber near the seacoast, the skill of American seamen and general trade conditions. After the Civil War the country's shipping entered a period of decline, particularly in its registered tonnage (the tonnage engaged in foreign commerce). In 1910 notwithstanding a great expansion of foreign trade the registered shipping was less than one third of what it had been fifty years earlier. Sailing ships were being rapidly replaced by steamships on ocean routes during the middle and latter parts of the nineteenth century. Coal, the fuel used in generating this steam power, was until late in the century more expensive at American coastal points than in England and some other parts of Europe. During the same period the displacement of wood by iron and later steel in ship construction also made for relatively higher building costs in the United States.

On the other hand, the exploitation of mineral

and other natural resources furnished a more lucrative field for American and foreign capital. As these resources were extensive and their exploitation was generally safeguarded by a high tariff, capital found in these fields much more profitable employment than in shipping. This diversion of American capital from maritime ventures to interior industrial activities altered the nature of the country's commerce. In international trade the United States became to an increasing extent a large exporter of commodities and similarly a greater importer of ocean transportation service.

During the years 1864 to 1877 and again after 1891 postal subsidies were paid to certain lines handling American mail destined for foreign ports. The granting of these subsidies during the first period was the result of the influence of shipowners and ship operators, who were beginning to feel the effects of changing conditions of navigation; their discontinuance was due to scandals arising out of the revelation of corrupt influences brought to bear upon Congress during the negotiations for one of the contracts with the Pacific Mail. The decline of American shipping on the high seas, however, coupled with a rapidly expanding foreign commerce attracted the attention of business men and political leaders. Agitation for governmental aid to this industry resulted in the act of 1891, which likewise had little effect in keeping any considerable number of American ships on the high seas. The reservation of the coastwise or inland trade to vessels flying the flag of the United States, however, was a potent influence in the growth of the country's enrolled tonnage (tonnage engaged in domestic trade).

The World War brought about a change both in the status of the United States as a maritime country and in governmental shipping policy. In 1914 the registered shipping of the country was slightly over 1,000,000 gross tons. By 1921 it had increased to over 11,000,000 gross tons, or more than 4,000,000 tons in excess of the enrolled tonnage. Since 1921 there has been a substantial decline in that part of the American merchant marine which is engaged in foreign trade. Even so it considerably exceeds the mercantile fleet of any other nation except Great Britain.

An important factor in the recent growth of the American merchant marine was the program of construction adopted by the United States upon its entry into the World War. As a result of this program and the addition of German vessels turned over to the United States the govern-

ment was by July, 1921, in possession of a mercantile fleet of 7,993,000 gross tons. Since the greater part of this fleet had been built to meet a world emergency, many of the vessels were poorly constructed and would have become unseaworthy after a few years' service; they were also built during a period of high costs. Within a year after the spring of 1920, when these costs had reached their peak, the selling values of ordinary freight steamers had declined about 70 percent. The United States government as a result of wartime building found itself in possession of the largest merchant fleet that had ever been directly owned by any government. The United States Shipping Board through the instrumentality of a subsidiary organization known as the Merchant Fleet Corporation organized the greater part of the fleet into several lines which have been operated under contract by various steamship companies. The United States Lines, which included the seized German vessels, were operated directly by the Merchant Fleet Corporation. It became a declared policy of the government to dispose of this fleet by sale as rapidly as possible. Partly because of the reduced prices of merchant vessels and partly in order to encourage private operation under the American flag vessels were sold much below their cost of construction. In 1929 the United States Lines and the American Merchant Lines were sold to Paul W. Chapman and Company for \$16,300,000, a price which according to some marine authorities was greatly below their true value. The *Leviathan* (*Vaterland*) alone is reputed to have been built at a pre-war cost of \$12,000,000. From 1925 to 1930 the United States Shipping Board sold to ten lines, for something less than \$23,000,000, 104 ships whose cost of construction had been \$258,000,000; that is to say, the sale price to the private owners represented 9 percent of the cost of construction to the government. On June 1, 1932, there still remained in the control of the board 364 merchant vessels with a gross tonnage of 2,099,438.

Post-war policy is indicated by the acts of 1916, 1920 and 1928 and by the provisions of several acts creating the construction loan fund. The act of 1916 provided for the organization of a Shipping Board, which was authorized to investigate complaints against the laws and practices of foreign governments operating in such a way as to be unfair to vessel owners of the United States. The Merchant Marine Act of 1920 gave the Shipping Board comprehensive

grants of power with respect to the acquisition and operation of ships and the regulation of all the commercial shipping of the country. The Merchant Marine Act of 1928 authorized the postmaster general to enter into negotiation with shipping lines engaged in the foreign trade for the carriage of oversea mail at rates and under conditions prescribed in the act. The mail subventions paid by the United States government under this act for the fiscal year ending June 30, 1930, amounted to \$13,066,441, and it is estimated that for the fiscal year 1938 they will be \$30,804,386.

A construction loan fund limited to \$25,000,000 was authorized under the Merchant Marine Act of 1920; this limit was greatly increased under subsequent laws and in 1928 was extended to \$250,000,000. Loans under these laws amounted to \$145,131,165 up to June 30, 1931.

American policy since the World War has been vigorous in its efforts to maintain the position gained in that struggle. Governmental encouragement has taken the forms of postal subventions, sales of government vessels at nominal costs, construction loans and continued reservation of the coastwise trade to American vessels. Notwithstanding these aids there has been a marked decline in the registered tonnage since 1922. Unlike the collapse following the Civil War, this decline has not been assisted by high material and fuel costs: bunker coal, fuel oil and steel are at least as cheap at the leading Atlantic ports of the United States as in any part of the world. While it is true that labor costs in both ship construction and operation are relatively high, this factor is probably not so serious an obstacle to the development of a large American marine as many writers maintain. The principal factors operating against the growth of American shipping on the high seas are primarily commercial in nature. Over many important ocean routes between the United States and foreign countries the differences in freight tonnages between outgoing and incoming traffic are marked. These differences are to some extent at least accentuated by the country's high protective tariff system. More important still is the general nature of the country's foreign trade balances. Among the most important items entering into international trade balances are exports and imports of merchandise, investments of capital across national boundary lines and returns thereon and the transportation of freight on the high seas. With respect to the first, the United States has had for several decades a large excess

of exports over imports; and government policy through its encouragement of export trade and the continuance of high tariff barriers has been favorable toward the maintenance of this excess. With regard to the second, during and since the World War the country has exported large amounts of capital and is now a creditor nation. In the case of transportation service on the high seas, the United States has been since the Civil War an importer rather than an exporter. Notwithstanding the importance of certain other items in the international balance sheet it seems unlikely that the policy of making shipping on the high seas a dominant industry will succeed without reducing the importance of other items in foreign trade. Commerce is a process of exchange; and in the long run large export items must be balanced with large import items.

The experience of the French in dealing with national shipping is more complete than that of any other people. Of peculiar interest is the pre-war bounty system, which was later adopted with modifications by some other European countries and by Japan. A law passed in 1881 provided for both construction and navigation bounties. The latter were allowed to owners of vessels built in France in accordance with the number of sea miles traveled in the course of a year, net tonnage and age of vessel and material of construction. Important changes in this law were made by the acts of 1893, 1902 and 1906. The bounty system seems to have had little influence on the growth of the national merchant marine. After the outbreak of the World War it was gradually abandoned; the last payments in the form of construction bounties were made in 1920 and navigation bounties ended with the appropriation of 100,000 francs (\$3920) in 1930-31. Like Great Britain and the United States, France has made large annual appropriations for contract mail services. In the fiscal year 1931-32 budget estimates placed them at 196,145,000 francs (\$7,688,884). The principles which govern this form of compensation are similar to those which obtain in other maritime countries.

A post-war development of considerable magnitude has been that of French maritime credit. In 1928 the French parliament adopted a comprehensive maritime credit law which was amended in 1929 and 1931. Loans to shipowners are effected through the *Crédit Foncier* or directly from some other lender or by issue of bonds. If the ship for which a loan has been incurred is constructed at home, half of the

interest charge is borne by the government; if constructed or purchased abroad, only 1.3 percent is assumed by the government.

The coasting trade of France is reserved to French vessels. This reservation, however, does not apply to trade between France and her overseas possessions except in the cases of Algeria, Tunis and Morocco. Railway rates to the coast are reduced in the case of exported goods carried in French vessels.

The pre-war expansion of German shipping was the result of economic influences which were partly responsible for the industrial development following the establishment of the empire in 1871. Down to the outbreak of the World War the imperial government did not directly expend public funds in aid of shipping except in the case of a few postal subvention contracts of limited duration and scope. Indirect aid, however, was afforded in various ways. Mail subventions were extended in pre-war times to lines serving what was then German East Africa and to others operating in the Far East and in Australia. The most important were those granted the North German Lloyd and the German East Africa Line. The only shipping service subsidy known to have been given in Germany since the war is local in character: it was granted to a line connecting the free city of Lübeck with certain Baltic ports.

One of the greatest agencies of artificial aid to German shipping in the pre-war period was state owned railways. While any action on the part of the government in lowering rates or entering into special agreements over specified routes was always based on the necessity of assisting German foreign trade, the national merchant marine indirectly profited by becoming the extension of the delivery system. Under the Versailles Treaty this aid to German shipping has been greatly weakened.

After the war the German government laid plans for the rehabilitation of its shipping, 85 percent of which had been turned over to the Allies or sunk. In 1921 there was provided at the request of German shipowners and through appropriations by the government a reconstruction fund for the replacements of the lost fleets. In 1925 the government authorized a loan fund of 50,000,000 marks (\$11,900,000) to be made available for new construction under certain conditions. Much American capital also flowed into Germany to be used in rehabilitating its shipping. Since 1921 the German merchant marine has exhibited a phenomenal growth.

While this has undoubtedly been facilitated by the post-war aids, economic factors have been its fundamental causes just as they were the chief influences in pre-war increases.

Among maritime countries Japan ranks third in vessel tonnage. As a result of the war with China in 1894, previous to which Japanese shipping was less than 300,000 gross tons, interest in ocean transportation was stimulated. In 1896 a law was passed granting general navigation bounties to steel and iron ships owned exclusively by Japanese subjects and plying between Japan and foreign ports. An act providing for construction bounties was also passed. Prior to 1896 Japanese shipping had also been aided by mail subventions. Under a revision of the postal service law in 1896 these yearly subsidies were greatly increased. In 1909 the law combined the two types of navigation aid provided for in the acts of 1896.

Japan after the World War made increasing provision for the maintenance and development of a national merchant marine. The construction bounty law was repealed in 1917. General navigation bounties have been continued and postal subventions have been increased. The total budget estimates for these subventions and bounties for the fiscal year 1929-30 were 10,823,924 yen (\$5,102,398). As in other commercial countries maritime credit has been greatly extended since the war. Public credit is given through selected banks. The relationship of the government to this maritime credit appears in appropriations of an interest subsidy to the banks making loans to shipping concerns.

The unique feature of post-war policy in Italy is the system of navigation bounties put into effect in 1926. Privately owned navigation lines are divided into "indispensable" and "useful" lines: the former are those connecting the peninsula with the islands and colonies of Italy; the latter those furnishing transportation between Italy and important foreign commercial centers. The indispensable lines receive a fiscal subsidy covering a period of twenty years; the useful lines a grant lasting five or ten years with diminishing annual payments. The subsidized lines are required to renew their ships to meet present day needs. In addition to these contract bounties provision is made for construction bounties. Under the reorganized system of 1926 the authorized subsidies and bounties are very large. For the fiscal year 1932-33 the total authorization for the contract service amounts to 269,485,000 lire (\$14,174,915). For the same year the

authorized construction bounties aggregate 62,000,000 lire.

Norway, which ranked fifth among the maritime nations of the world in 1931, has evolved a shipping policy out of a geographical situation. The country has an extraordinarily long coast line with numerous inlets (fiords), and two thirds of the population live near the seacoast. Communication is dependent upon ships, and the government therefore undertakes to absorb deficits caused in the maintenance by private companies of regular transportation services. Postal subventions are paid carriers in the foreign service along three routes, of which the most important is that between Bergen and Newcastle. In 1929-30 the contribution to this service amounted to 250,000 kroner (\$67,000). The budget estimates for the same year covering all state contributions to private shipping amounted to 5,865,000 kroner (\$1,567,000). No laws restrict the coasting trade to ships of Norwegian registry. A mutual treaty between Sweden and Norway dating from 1905 reserves the coastwise trade of each, as between themselves, to national vessels.

The development of shipping in the Netherlands has not required any material governmental aid, although various artificial incentives have been used to promote the industry in the past. Up to 1872 lower tariff duties were imposed upon products moving between the Netherlands and its East India possessions, but this differential is now entirely abolished. Before 1912 the coastal trade within the archipelago was closed to vessels of foreign nationalities, but this trade is now open to all vessels under limited restrictions. The need for regular and frequent steamship service between the Netherlands and its East India colonies has resulted in the establishment of this service by Dutch vessels through contracts by which the government assumes certain financial responsibilities. The amounts paid out by the government for the maintenance of these services is relatively small. In 1928 the total monetary aid given the shipping industry was about 196,000 florins (\$79,000).

ABRAHAM BERGLUND

See: SHIPPING; SHIPBUILDING; SEAMEN; MERCANTILISM; ACTS OF TRADE, BRITISH; SUBSIDIES; NATIONAL DEFENSE; NAVY; ARMED MERCHANTMEN; MERCHANTMEN, STATUS OF; WAR ECONOMICS; INTERNATIONAL TRADE; PORTS AND HARBORS; WATERWAYS, INLAND.

Consult: Meeker, Royal, *History of Shipping Subsidies* (New York 1905); National Industrial Conference Board, *The American Merchant Marine Problem* (New York 1929); United States, Institute for Government

Research, "The United States Shipping Board" by D. H. Smith and P. V. Betters, *Service Monographs*, no. 63 (1931); United States, Bureau of Foreign and Domestic Commerce, "Government Aid to Merchant Shipping" by G. M. Jones, *Special Agents Series*, no. 119 (1925); United States, Bureau of Foreign and Domestic Commerce, "Shipping and Shipbuilding Subsidies" by J. E. Saugstad, *Trade Promotion Series*, no. 129 (1932); United States, Congress, House of Representatives, Committee on Merchant Marine, Radio and Fisheries, 72nd Cong., 1st sess., *Hearings* (1932); Magnes, Jacob, "The Recovery of Germany's Merchant Marine after the War" in *Harvard Business Review*, vol. ix (1930-31) 57-68; Berglund, Abraham, *Ocean Transportation* (New York 1931); Helander, Sven, *Die internationale Schifffahrtskrise und ihre weltwirtschaftliche Bedeutung* (Jena 1928); Marvin, W. L., *The American Merchant Marine* (New York 1902); Schiedewitz, E. W., *Subventionierung von Weltschifffahrt und Weltschiffbau* (Hamburg 1931); Vries, Max de, *Heutiger Protektionismus in der Weltschifffahrt* (Berlin 1930).

MERCHANTMEN, STATUS OF. A merchantman as distinguished from a warship or a public vessel, as the term is here used, may be said to include vessels irrespective of ownership, size or motive power which are engaged in non-governmental and ordinary commercial activity, such as carriage of persons and goods for hire. Although they are inanimate things vessels are in some respects, in legal contemplation, assimilated to persons, so that a status is attributed to them. In consequence of this personification vessels are objects of international law and of public and private maritime law.

In international law the status of merchantmen is determined primarily by their nationality. The nationality of the vessel is evidenced by the flag the ship is entitled to fly. The right to fly the flag is in turn determined by the vessel's registration. The conditions under which a vessel will be admitted to registration in a particular country may generally be determined by national law. Some states, for example, the United States, Great Britain and Germany, require that the vessel should be wholly owned by nationals or by domestic corporations having their principal place of business within the state; others, like France, require only that it must be partly so owned. In some instances the vessel must be constructed within the country; in the United States except as to vessels engaged in coastwise trade this condition was removed with the passage of the Panama Canal Act in 1912. In other states admission to registration is conditioned upon the manning of the vessel by nationals to the extent of a fixed proportion of officers and crew. In France, for instance, all

the officers and three fourths of the crew of a ship flying the French flag must be French nationals (Law of September 21, 1793, modified, however, as to vessels of small tonnage by the Law of April 7, 1902).

It should be noted that the flag, which in the case of warships is conclusive, and the certificate of registration are, in the case of merchantmen, merely *prima facie* evidence of nationality. If the issue of fraudulent registration is raised, the flag and the documents presumably supporting the vessel's right to fly such a flag do not of themselves overcome the evidence of fraud. Controversies relating to fraudulent registry are frequent both in time of peace (e.g. with respect to smuggling vessels) and in time of war (e.g. with respect to claims of neutral status).

International law recognizes that the merchantman is entitled to the protection and is subject to the jurisdiction of the state whose flag it flies. The extent of this protection and jurisdiction varies according to whether the vessel is on the high seas or within the territorial waters or ports of another sovereignty. The incidents of the vessel's status as evidenced by its nationality are not the same in war time as in peace time. Finally, the nature of its ownership—whether it be privately or government owned—has certain consequences.

As the high seas are not subject to the jurisdiction of any state, no nation can attempt to exercise authority thereon over the vessels of another state. By virtue of this principle of the freedom of the seas a state has exclusive jurisdiction over its vessels on the high seas, limited only by generally accepted principles of international law or by treaty. To explain the exclusive jurisdiction which a state in fact exercises beyond its territory the fiction of the territoriality of vessels has been invented, by which a vessel has been regarded as a floating portion of the flag state's territory. This fiction, however, has been sharply criticized as unnecessary and has now been repudiated by the majority of courts and writers. The exclusive jurisdiction of the flag state over acts and transactions occurring aboard the vessel while on the high seas has important consequences. The validity of contracts concluded and of marriages solemnized on such a vessel is governed by the law of the flag state. Tortious acts or crimes committed on such a vessel are punishable by its laws irrespective of whether the act is committed by passengers or by members of the crew. Children born on board a ship may be deemed to have

acquired the nationality of the flag state *jure soli*.

In a strictly defined category of cases the exclusive jurisdiction of the flag state over its merchantmen on the high seas is limited, and a concurrent jurisdiction is conceded to other states. International law permits the apprehension by any nation of vessels guilty of acts of piracy. A state may also exercise acts of authority over a foreign vessel on the high seas in self-defense, as in case of suspicion that the vessel is engaged in an enterprise endangering the safety of the particular state (see the case of the *Virginus* in Moore's *Digest of International Law*, vol. ii, p. 895, 980). Finally, customary international law concedes a right of interference on the high seas in case of hot pursuit begun in the territorial waters of a state in order to punish a violation of its municipal laws. The question whether the flag state has exclusive jurisdiction over acts which are committed on board ship but the effects of which take place outside the vessel was decided in 1927 in the negative by the Permanent Court of International Justice in the celebrated case of the steamship *Lotus*. The flag state's exclusive jurisdiction may of course also be impaired by virtue of treaties. In the interest of prevention and suppression of the slave trade the visit and search of merchantmen has been permitted in case of suspicion (see the General Act of the Brussels Conference of July 2, 1890, in *British and Foreign State Papers*, vol. lxxxii, 1889-90, p. 55-81). The dispute over the policing of fisheries led to the Bering Sea Fisheries Arbitration and to several international conventions aiming at the protection of the riches of the seas, as a result of which merchantmen are subject to interference by states other than the flag state.

When a merchantman passes through or enters the territorial waters or ports of another state, the flag state's jurisdiction is limited to a greater or less extent by the concurrent jurisdiction of the local sovereign. There is, however, an important although frequently ignored distinction if such passage is only transitory. International law recognizes the right of innocent passage of merchantmen; i.e. the right to pass freely through territorial waters without interference by the local sovereign. The right of innocent passage is a compromise between the principle of the freedom of the seas and the principle of the littoral state's exclusive jurisdiction over its territorial waters. Nevertheless, even ships in innocent passage are expected to comply with reasonable rules of the local sov-

eign relating to the safety of navigation and the policing of the seas.

Merchantmen passing through territorial waters bound for port and vessels in port are as a matter of principle fully subject to the jurisdiction of the littoral state. No immunity whatever may be claimed for any such vessel under international law except in case of distress. As a matter of practise, however, the local sovereign will usually decline to take jurisdiction over matters pertaining exclusively to the internal order and discipline of the vessel. By well established international custom jurisdiction in such matters is retained by the flag state, whose consul is empowered by virtue of treaty provisions to exercise such jurisdiction.

As to all other matters, such as crimes or torts committed aboard ship and involving strangers to the crew, the local sovereign has a perfect right to take jurisdiction, although such interference is usually declined unless the act is likely to affect public order and peace ashore. This practise the American and English courts explain simply on a discretionary basis. On the other hand, most of the continental courts, following the French practise, take the position that international law does not permit interference with a foreign vessel unless the acts committed aboard involve strangers to the vessel or endanger peace and tranquillity ashore or unless the aid of the local authorities is invoked. Despite these theoretical differences the practises of Anglo-American and continental courts do not vary greatly.

Until recently government owned or operated vessels were regarded as having while in port certain immunities from local jurisdiction not enjoyed by privately owned merchantmen, on the ground that they were invested with the character of public vessels which shared the sovereign immunities and privileges of their governments under international law. With the rapid increase of government ownership and operation of merchant ships engaged in ordinary maritime commerce the inconveniences of such privileges became more pronounced; and following the opinion expressed by text writers and also the court decisions of several countries, notably Italy, Belgium and later France, the International Convention for the Unification of Certain Rules concerning the Immunities of Government Vessels, signed at Brussels on April 10, 1926 (for text see United States, Department of State, *Treaty Information Bulletin*, no. 18), assimilated such vessels to privately

owned merchantmen. Although the convention is not yet in force because of failure of several of the signatories to ratify and although the United States is not a party to it, there seems to be little doubt that the general tendency is strongly in favor of the denial of jurisdictional immunity of merchantmen merely by reason of government ownership or operation.

The status of merchantmen is materially affected in case of war. On the high seas enemy merchantmen are subject unqualifiedly to capture and in exceptional cases to destruction by belligerent warships. Enemy merchantmen in port at the outbreak of a war were in earlier times subject to capture and confiscation. But since the middle of the nineteenth century the practise of belligerent powers has been to allow a certain period of grace in which enemy merchantmen are permitted to depart freely. This practise was embodied in the Convention Relating to the Status of Enemy Merchant Ships at the Outbreak of Hostilities adopted at the Second Hague Conference in 1907. Freedom from confiscation was conceded also to enemy merchantmen which left port before the outbreak of a war and were ignorant of its existence, although such ships might be detained subject to subsequent restoration without indemnity.

Prior to 1856 merchantmen were extensively used as warships in maritime warfare. The belligerent governments, which in earlier times seldom possessed a standing navy, issued commissions, or "letters of marque," to private vessels, which were then called privateers. With the abolition of privateering in 1856 by the Declaration of Paris states resorted to other forms of utilizing their merchant marine; they began to convert their merchantmen into duly commissioned warships. Although this practise, first used by Prussia in 1870, was objected to by France as a disguised form of privateering it was legalized by the adoption of the Convention Relating to the Conversion of Merchant Ships into Warships at the Second Hague Conference in 1907. This convention, however, enacted specific rules as to the place at which and conditions under which conversion of merchantmen into armed vessels might be effected and provided for the placing of such vessels under the direct command of naval authorities so as to prevent the recurrence of the lawlessness attendant upon the practise of privateering.

On the other hand, the neutral flag state's exclusive jurisdiction over its merchantmen is severely impaired by the belligerent's right of

visit and search to ascertain the *bona fide* neutral character of the ship and the ownership and destination of the cargo and by the right of capture in case the vessel carries enemy goods or contraband or is guilty of breaking a blockade or of unneutral service. It should be noted that the basis for the determination of the nationality of a vessel in time of war is different from that in time of peace. A neutral owner's domicile in enemy territory may cause enemy status to be attributed to a vessel. The exercise of the right of visit, search and capture of neutral merchantmen has been at all times a much disputed issue between belligerents and neutrals. In order to escape capture and condemnation merchants of belligerent countries began from early times to transfer their vessels to neutral owners in order to secure the more or less extensive protection of the neutral flag. As such transfer was in many instances only feigned, belligerents have laid down increasingly stringent rules for determining the *bona fide* nature of such transfer. Difficulties have arisen also from the use of neutral flags by belligerent vessels for the purpose of deceiving enemy warships. These and other cognate matters are regulated by the international law of neutrality and of belligerent rights and duties.

FRANCIS DEÁK

See: MARITIME LAW; INTERNATIONAL LAW; FREEDOM OF THE SEAS; TERRITORIAL WATERS; JURISDICTION; NEUTRALITY; ARMED MERCHANTMEN; BLOCKADE; TRADING WITH THE ENEMY; CONTRABAND OF WAR; ALIEN PROPERTY; ANGARY; PRIZE; PRIVATEERING; PIRACY; SLAVE TRADE; MERCHANT MARINE.

Consult: Jessup, Philip C., *The Law of Territorial Waters and Maritime Jurisdiction* (New York 1927); Gidel, Gilbert, *Le droit international public de la mer*, 2 vols. (Châteauroux 1932), especially vol. i. For further bibliography see: Hershey, Amos S., *The Essentials of International Public Law and Organization* (rev. ed. New York 1927), especially p. 297-317, 326-38, 569-71, 627-29; Oppenheim, L. F. L., *International Law*, 2 vols. (4th ed. by A. D. McNair, London 1926-28), especially vol. i, p. 279-85, 488-99, and vol. ii, p. 163-68, 179-91, and 223-29. For leading decisions of national courts see: *Wildenhus' case*, 120 U. S. 1 (1887); *Cunard Steamship Co. v. Mellon*, 262 U. S. 100 (1923); *The Queen v. Keyn*, L. R. 2 Ex. Div. 63 (1876); *The Sally and the Newton*, France, *Bulletin des Lois*, 4th ser., vol. v (1807) 602-04; "The Tempest," France, *Jurisprudence Générale, Recueil périodique et critique de jurisprudence, de législation et de doctrine* (1859) pt. i, p. 88-93. For the case of the S. S. "Lotus" see Permanent Court of International Justice, *Publications*, ser. A, no. 10 (Leyden 1927).

MERCHANTS ADVENTURERS. *See* CHARTERED COMPANIES.

MERCIER DE LA RIVIÈRE, PIERRE-PAUL (Lemercier or Le Mercier) (1720-93), French physiocrat. From 1747 to 1759 Mercier was councilor at the Parlement of Paris and from 1759 until 1764 intendant on the island of Martinique, where he compromised himself by violating the restrictions of the colonial system sanctioned by the *Pacte colonial*. After 1765 he became an avowed adherent of the physiocratic school, of which his *L'ordre naturel et essentiel des sociétés politiques* (2 vols., Paris 1767; reprinted with introduction by E. Depitre, 1 vol., 1909) constituted one of the most reverberating productions. Its publication was followed by an invitation to Mercier to visit and advise Catherine the Great; but the two failed to be harmonious and Mercier's stay was not protracted. In 1768 Dupont de Nemours issued an abridgment of *L'ordre naturel* under the title *De l'origine et des progrès d'une science nouvelle* (Paris 1768; reprinted with introduction by A. Dubois, 1910).

Mercier's work developed and analyzed the governmental ideals of physiocracy, obscuring its original agricultural tenets but resting entirely upon doctrines already outlined in Quesnay's "Despotisme de la Chine" (in *Éphémérides du citoyen*, 1767). Coownership of all fixed wealth by the hereditary sovereign is, according to Mercier, the necessary political counterpart and balance for private property and class inequality, which are the essential characteristics of the social order. The fundamental unity of the law becomes incarnate in the sovereign, who must be an absolute monarch exercising the legislative power as well as the executive. If the legislative function were to devolve upon representatives of the nation and to be shared in by a multitude of men, "among whom inequalities exist and should exist and each of whom however is desperately eager that the inequality turn in his own favor," the result would be only to bring into relief the irreconcilability of private interests. Abuse of "legal despotism," as the physiocratic political ideal is known, would not occur if the sovereign understood his own interests or, in case he lacked such understanding, it could be speedily terminated by recourse to the ungainsayable sanction of physical force. To provide an additional safeguard the magistrates of the king not only should enjoy complete independence but when new laws were contemplated should have the right to examine them, to register a suspensive veto and even to exercise constitutional control over them. Public opinion, "queen of the world," would be the final check; as Mer-

cier pointed out in his "Mémoire sur l'instruction publique" (in *Nouvelles éphémérides*, nos. ix-x, 1775), its supremacy should be rendered enlightened by the organization of a public educational system to disseminate throughout the nation the irresistible evidence of reason. When he referred to the nation he meant essentially the landed proprietors and the agricultural entrepreneurs, the only subjects whose wealth could not be "rendered mobile without loss." Laborers he excluded as an unstable category of population having no organic connection with the fatherland.

G. WEULERSSE

Other works: *L'intérêt général de l'état* (Paris 1770); *Essai sur les maximes et les lois fondamentales de la monarchie française* (Paris 1789); *Palladium de la constitution politique* (Paris 1790).

Consult: Weulersse, G., *Le mouvement physiocratique en France*, 2 vols. (Paris 1910); Silberstein, L., *Lemercier de la Rivière und seine politischen Ideen*, Historische Studien, vol. clxxx (1928); Joubleau, M. F., in *Académie des Sciences Morales et Politiques, Séances et travaux . . . compte rendu*, vol. xlv (1858) 439-55, vol. xlvii (1859) 121-50, 249-65; Larivière, C. de, "Mercier à St. Pétersbourg en 1767" in *Revue d'histoire littéraire*, vol. iv (1897) 581-602; Richner, E., *Le Mercier de la Rivière, Führer der physiokratischen Bewegung in Frankreich*, Zürcher volkswirtschaftliche Forschungen, vol. xix (Zurich 1931).

MERGER. *See* COMBINATIONS, INDUSTRIAL.

MERIT SYSTEM. *See* CIVIL SERVICE.

MERIVALE, HERMAN (1806-74), English colonial theorist and administrator. After a brief and unsuccessful career as a lawyer Merivale became professor of political economy at Oxford, where from 1839 to 1841 he lectured on colonization and colonies. These lectures, particularly interesting for their analysis of Wakefield's land settlement scheme, won him in 1847 the assistant undersecretaryship for the colonies. In 1848 he became permanent undersecretary and from 1859 until his death served in the India Office in the same capacity.

While not of the anti-imperialist group Merivale believed with them that the expense of defending and administering colonies was unjustified without concrete reciprocal benefits to the home country. He saw real value in colonies as a field for emigration, trade and investment. While he held also that the self-governing colonies would ultimately withdraw from the empire, he recognized the force of imperial sentiment and even commended it moderately. He advocated

unrestricted trade and more complete autonomy for the "settlement" colonies, union with which might be preserved by gradual relaxation of the bonds of dependence and military protection, and retention of the nominal supremacy of the crown. Merivale's direct influence on colonial policy from his strategically placed offices must have been considerable. In 1860, shortly before far reaching changes occurred in Indian administration, the *Spectator* attributed to him chief responsibility for the government's measures.

In politics Merivale was a Liberal. He wrote frequently on historical, economic and literary topics for the *Edinburgh Review*, *Pall Mall Gazette* and other periodicals.

DONALD O. WAGNER

Important works: *Lectures on Colonization and Colonies*, 2 vols. (London 1841-42; new ed., 1 vol., 1861; reprinted Oxford 1928); *Historical Studies* (London 1865).

Consult: Bodelsen, C. A. G., *Studies in Mid-Victorian Imperialism* (Copenhagen 1924); Wagner, Donald O., "British Economists and the Empire" in *Political Science Quarterly*, vol. xlv (1931) 248-76, and vol. xlvii (1932) 57-74.

MERKEL, ADOLF JOSEF (1836-96), German jurist. Merkel was born in Mainz, the son of a Hessian jurist. He was professor successively at Prague, Vienna and Strasbourg and in 1893 was elected to fill Jhering's place as corresponding member of the Berlin Academy of Sciences.

Merkel presented with unrivaled skill, which indeed approached art, the deeper relationships of crime and punishment in social life. As the "legal philosopher of positivism" after the downfall of the great idealistic systems he limited the subject of his scientific and philosophical investigations to historically received legal material. In his attempt to advance from the given legal forms to the general concepts of the criminal law and of law in general he identified the philosophy of law with general legal doctrine. He thus became an exponent of so-called *Allgemeine Rechtslehre* as the proper concern of the theoretical jurist. In following the great evolutionary history of the law he saw it as advancing in increasing measure toward its role as a system of peace, as neutral mediator between conflicting powers. Although his point of view, which was causal, did not stop at human action it did not, however, sacrifice personal responsibility by his confession of determinism. For guilt was for him a double judgment: a causal leading back of the deed to the human personality and a

judgment according to the prevailing value judgments on which the law rested. Punishment was retaliation but it was no longer to be accepted as a categorical imperative. Indeed the increasing objectivization of the criminal law signified a narrowing of the state's powers of punishment, as is evident in such results as the differentiation of special crimes and in the necessary relation of penalties to the gravity of particular crimes—in decided contrast to a pure system of prevention, which takes symptoms of future danger as the occasion for indefinite measures of safety.

Thus Merkel seemed to Liszt the "deterministic opponent of purposeful punishment" (*Zweckstrafe*). Liepmann and Kohlrausch, on the other hand, found in his doctrines valuable beginnings for a critical deepening and delimitation of the criminal law reform movement. There can be no doubt that he acted as intermediary in the conflict between the classical and modern schools, for while he retained the old concepts in name he filled them with new meaning. But philosophically the monism of the historico-empirical method is wrong. That which should be cannot be derived from that which is becoming. Positivism eliminates justice from the law. Nevertheless, it remains the merit of Merkel to have penetrated deeply into the historical evolution and the sociological relations of law and politics.

MAX GRÜNHUT

Important works: *Kriminalistische Abhandlungen*, 2 vols. (Leipzig 1867); *Juristische Enzyklopädie* (Berlin 1885; 7th ed. by Rudolf Merkel, 1922); "Münzverbrechen und Münzvergehen," and "Die Eigentumsverletzungen" in *Handbuch des deutschen Strafrechts*, ed. by F. von Holtzendorff, 4 vols. (Berlin 1871-77) vol. iii, chs. xv, xxvii, and vol. iv, ch. xv; *Hinterlassene Fragmente und gesammelte Abhandlungen*, 2 vols. (Strasbourg 1898-99); *Die Lehre von Verbrechen und Strafe*, ed. by Moritz Liepmann (Stuttgart 1912).

Consult: Liszt, Franz von, "Die deterministischen Gegner der Zweckstrafe," and Liepmann, Moritz, "Die Bedeutung Adolf Merkels für Strafrecht und Rechtsphilosophie" in *Zeitschrift für die gesamte Strafrechtswissenschaft*, vol. xiii (1893) 325-70, and vol. xvii (1897) 638-711; Kohlrausch, Eduard, "Über deskriptive und normative Elemente im Vergeltungsbegriff des Strafrechts" in Walter, Julius, and others, *Zur Erinnerung an Immanuel Kant* (Halle 1904) p. 267-84; Stintzing, R. von, and Landsberg, E., *Geschichte der deutschen Rechtswissenschaft*, 3 vols. (Munich 1880-1910) vol. iii, pt. ii, p. 709-14.

MERRHEIM, ALPHONSE (1881-1925), French labor leader. Merrheim, an outstanding representative of revolutionary syndicalism, was of proletarian origin. A balanced, clear thinking,

self-trained leader, he was an organizer of great power. After the decline of individualistic anarchism, which had been compromised by a series of acts of violence in 1892-93, French anarchists entered the trade union and cooperative movements, opposing to proletarian parliamentarism economic action in the form of the general strike. They attacked the influence of intellectuals in the labor movement, regarded the union rather than the party as the basis of the proletarian movement and in general followed Proudhon rather than Marx. Merrheim was one of the organizers of the boiler makers' union and of the *Confédération Générale du Travail* (C.G.T.) founded in 1895 along these lines and he was general secretary of the important metal workers' union from 1909 to 1924.

Merrheim became important chiefly during the World War, which unlike most leaders of the C.G.T. he opposed. He founded the *Comité pour la Reprise des Relations Internationales* and with Bourderon participated in the international conferences at Zimmerwald in 1915 and Kienthal in 1916, allying himself with the right wing of the internationalist socialists. His demand was for peace without annexations, following the general policies laid down by Woodrow Wilson and opposing those of the Zimmerwald left led by Lenin. He collaborated with the right wing leaders of the C.G.T. and the government to terminate the metal workers' strike of 1918. At first a defender of the Bolshevik revolution as correct for Russia, he later became a bitter critic of the Communist movement. At labor union congresses after the war he declared that he had never wished to hinder military operations by his propaganda, he opposed resolutions attacking the C.G.T. war record, he voted against affiliation with the Red International of Labor Unions and he urged that the C.G.T. devote itself to a war against immorality in all classes. He died as the result of a mental disease.

CHARLES RAPPOPORT

Consult: Picard, Roger, *Le mouvement syndical durant la guerre*, Carnegie Endowment for International Peace, Social and Economic History of the World War, French series, vol. xxxi (Paris 1927); Saposs, David J., *The Labor Movement in Post-war France* (New York 1931); Losowsky, A., *Frankreich und die französische Arbeiterbewegung in der Gegenwart*, Red International of Labor Unions, Bibliothek, vol. xiii (Berlin 1922).

MESMER, FRANZ ANTON (1733/34-1815), Austrian physician. The main surviving interest in Mesmer is concerned not with his somewhat

adventurous career, beginning in Vienna in 1777 with the reputed cure of a case of blindness by the use of magnets and closing abruptly in Paris in 1784; nor with the excited scenes about the *baquet*, where ladies of fashion crowded his curative and lucrative seances; nor with the successive scientific commissions which passed, most of them unfavorably, upon his pretentious claims to the discovery of a new, beneficial force, animal magnetism; but rather with his relation to the later recognition of hypnosis as a psychotherapeutic agency.

The accepted verdict of Mesmer as a charlatan does not entirely deprive him of a place of consequence. The discoverer of the fact that the more susceptible subjects whom Mesmer magnetized were in an abnormal state of mind, responding to suggestions or commands from the *magnétiseur* and unresponsive to their surroundings, was the Marquis de Puységur, one of the private pupils of Mesmer enrolled in the select Loges d'Harmonie. Continuing the observations after the revolution upon peasants on his estate, Puységur clearly recognized their abnormal condition. He utilized it by having the entranced subjects, whom he called *somnambules*, prescribe for the ailments of the sick who came to him for cure. He believed that these subjects, whose state he termed "artificial somnambulism," could see and read the internal conditions of the bodily organs. The condition was decisively recognized by James Braid in 1843, who gave it the name of hypnotism. Both before and after Braid the role of suggestion was indicated; but this clue was not made central until the school of Nancy demonstrated (about 1880) the major influence of this factor as against the school of Paris headed by Charcot, who regarded the state as of direct physiological origin and distinguished three such conditions. The period of the 1890's witnessed a marked revival of the use of hypnosis in therapeutic treatment; it has since receded to a minor place, although it is still useful in conjunction with other methods of psychotherapy and for the purposes of research.

Mesmer's insistence upon his theory of animal magnetism, itself a revival of an earlier discredited notion of magnetic and planetary influence, prevented his recognition of the true condition of his subjects. His opposition to the prevalent view that it was all imagination was, however, in the line of progress. But for Mesmer, the course of discovery might have been far different.

JOSEPH JASTROW

Consult: Janet, Pierre, *Les médications psychologiques*,

3 vols. (Paris 1925-28), tr. by E. and C. Paul, 2 vols. (London 1925) vol. i, p. 29-43; Zweig, Stefan, *Die Heilung durch den Geist* (Leipzig 1931), tr. by E. and C. Paul as *Mental Healers* (New York 1932) p. 3-100; Schürer-Waldheim, F., *Anton Mesmer, ein Naturforscher ersten Ranges* (Vienna 1930); Bersot, Ernest, *Mesmer et le magnétisme animal* (4th ed. Paris 1879).

MESSEDAGLIA, ANGELO (1820-1901), Italian economist, sociologist and statistician. Messedaglia was professor of law at Padua and of administrative law and later of political economy and statistics at the University of Rome. Early in his career he published *Dei prestiti pubblici e del miglior sistema di consolidazione* (Milan 1850), a theoretical and practical study of the formation, management and consolidation of public debt. It was followed by *Della teoria della popolazione* (Verona 1858), in which he criticized the work of Malthus by showing the inadequacy of the two Malthusian progressions and corrected them by a third series which approximates more closely the actual growth of population. He continued his writings on demography with an essay on M. A. Guerry, *Relazione critica sull'opera di M. A. Guerry* (Venice 1865), and *Studi sulla popolazione* (Venice 1866), both of which first appeared in the *Atti* of the Istituto Veneto. Of importance too are his parliamentary report on the distribution of land, the cadastre and the land tax (Parlamento Italiano, Camera dei Deputati, Sessione 1882-86, Discussione, *Atti*, vol. xv), distinguished for its elaborate analysis and wealth of detail; and *La storia e la statistica dei metalli preziosi* (Rome 1881) and *La moneta e il sistema monetario in generale* (2 vols., Rome 1882-83), both of which first appeared in the *Archivio di statistica*, in which he formulated inductive laws of monetary circulation.

In the field of statistics, which he elevated to the dignity of a science, Messedaglia contributed a number of studies including his essays on the organization, collection and significance of criminal statistics (*Le statistiche criminali dell'Impero austriaco nel quadriennio 1856-1859*, Venice 1866-67; first published in the *Atti* of the Istituto Veneto); his subtle investigations into the concept, statistical significance and the methods of determining the average life ("Il calcolo dei valori medi e le sue applicazioni statistiche" in *Archivio di statistica*, vol. v, 1880, p. 177-224, 489-528); and the five unforgettable introductory lectures to his course on statistics given at the University of Rome, in which he treats in a masterly manner the method, function and scope of the science (*V prelezioni al corso di*

statistica, Biblioteca dell'Economista, vol. xix, Turin 1908).

Messedaglia made use of the mathematical, statistical and historical methods but regarded them as auxiliary means; he was always aware that they do not by themselves explain the complexity of economic phenomena. He had a keen perception moreover of the interrelations of the various disciplines, as is evidenced in his *L'economia politica in relazione colla sociologia e quale scienza a sè* (Rome 1891), an erudite essay on the relations between economics and sociology, in which he shows also the influence of knowledge on the social order; he frequently referred to this study as his scientific testament. Among Messedaglia's other writings are works on astronomy and geography of ancient epochs and a translation of Longfellow's poems.

ALBERTO DE' STEFANI

Works: Messedaglia's more important works have been collected in *Opere scelte di economia e altri scritti*, 2 vols. (Verona 1920-21).

Consult: Lampertico, Fedele, *Commemorazione di Angelo Messedaglia* (Venice 1902); Stefani, Alberto de', *Discorso su A. Messedaglia* (Vicenza 1914), and *Gli scritti monetari di Francesco Ferrara e di Angelo Messedaglia* (Verona 1908); De Viti de Marco, Antonio, *Due commemorazioni: Angelo Messedaglia; Maffeo Pantaleoni* (Rome 1927); Scalfati, S. G., *Gli scritti finanziari di A. Messedaglia* (Rome 1932).

MESSIANISM is primarily the religious belief in the coming of a redeemer who will end the present order of things, either universally or for a single group, and institute a new order of justice and happiness. Under various forms and under various names messianic ideas have sprung up without any apparent interconnection in widely scattered religions. They seem to answer to a universal ingrained longing in humanity for a world free from the imperfections and sufferings connected with this one and to the hope that a personal redeemer, a hero-god, will bring about salvation. As a driving social force, however, messianism has assumed great importance only in Persian Zoroastrianism and above all in Judaism, whence it has gone over into Christianity and Islam. It is in the Jewish doctrine of the Messiah that the doctrine of the coming of a redeemer received its greatest and most characteristic development, a development that not only influenced the religious thought of the West but also indirectly inspired modern secular movements.

Messianism has been closely connected with other religious ideas, such as eschatology, or the

doctrine of the final things concerning man and the world, and the theory of the ages of the world, which is the basis of chiliasm, or millenarianism; but messianism is not to be confounded with these other ideas. Speculation about final things, such as death, life after death and the end of the world, which is quite general in religious doctrine, does not necessarily involve a distinct messianic belief; on the other hand, Jews often thought of the coming of the Messiah without implying thereby the end of the world or even the transformation of the whole world. Messianism moreover is never mere theoretical speculation about things to come; it is always a living practical force. It is a belief held with religious fervor by oppressed or unfortunate groups (ethnic, social, religious) or by men suffering either from the imperfection of their fellow human beings or from the consciousness of their own inadequacy, that a change will come which will end their sufferings and fill the world with piety and justice. There is always in messianism a non-acceptance of the present order and a sentiment of revolt against things which seem unbearable.

Often messianism was the expression of a narrow group mind. In such cases it meant that to the suffering group alone justice would be done and that for them alone sufferings would end and new happy life begin. But even in earlier Judaism messianism had already acquired a wider, more universal aspect as well as a more spiritual meaning. It meant that the whole of mankind was suffering either from misery and oppression or from moral imperfection and that the Messiah would bring to all mankind justice, deliverance from misery and pain, a blossoming of the life of the spirit and a reign of brotherhood and peace. Messianism was thus a philosophy of history and a theodicy which explained the ways of God. As such it passed into Christianity and accompanied the struggle of heretical sects and oppressed classes for the realization of their dreams and aspirations; it lent its forms and symbols to the obscure longing of millions; and it ended up by being clothed in the garments of the philosophy of the Enlightenment and modern social science, becoming the secular idea of progress, that is to say, a messianism deprived of its religious forms but retaining its religious fervor.

Both aspects of messianic doctrine, the narrow messianism which aims only at a fundamental betterment of a national political situation and the universal messianism which embraces in its

salvation the whole of mankind, are often to be found associated together, the deliverance of the group being thought of as a vehicle or preliminary condition of universal deliverance. This intermingling of national ambitions and religious concepts, as evolved by the Jews and taken over by most European peoples (particularly those of great and active intellectual and spiritual life), is not without danger for world peace and security. Through the religious element national political hopes become strengthened and deepened into the belief that their fulfilment is an action of divine justice and that the struggles for their realization must be carried on as commands of God. National messianism thus becomes the cradle of an unbridled imperialism: the nation, the chosen vehicle of God's designs, sees in its political triumph the march of God in history. The concept of proletarian revolution also owes much of its driving force to messianism.

The comparative history of religions reveals ideas similar to Jewish messianism flourishing in various religions but remaining without a dominant influence either in the particular religion or in cultural history. Among such ideas may be mentioned the doctrine of Maitreya, or Metteyya, the future Buddha, whose advent will bring about a golden age of the future. This theory of Maitreya is the product of a rather late stage of Buddhism at the time when the doctrine of the many Buddhas, or Bodhisattvas, was developed. Of more importance is the doctrine connected with Vishnu, who was considered the "guardian and restitutor of *dharma*, or justice" (Paul Deussen) and often raised to the position of the supreme or even the unique god in Indian mythology. Vishnu was pictured as descending to earth from time to time and in different forms. "Every time when justice has withered and injustice dominates, I myself recreate myself." Ten descents (avatars) of Vishnu are known in Hindu theology; the last avatar (the tenth, when Vishnu will come as a Kalki, a white winged horse) has yet to occur and will destroy the earth.

The closest resemblance to Jewish messianism is found, however, in the doctrine of Saoshyant, the coming helper, in Zoroastrianism. Zoroaster himself believed originally like Jesus that the fulness of time was near and that the reign of Ormazd, the kingdom of God, would come during his lifetime. For Zoroastrianism as for many millenarian sects the world is a battle ground between God and the Evil One (who is in

Christian theology represented by Satan or Antichrist), and the duty of men is to help God to win His victory. Zoroaster believed that the decisive battle between Ormazd and Ahriman was at hand and that Ormazd's victory would usher in a new age, a new aeon, when evil would be definitely banned and God alone reign. But inasmuch as the fulness of time had not come during Zoroaster's life, the decisive battle and the coming of the kingdom had to be postponed as in Christianity to a second advent. Zoroastrians believe that three thousand years after the death of Zoroaster a new Saoshyant will come and the new aeon begin.

The word messiah (Hebrew *māshiah*) means literally the anointed one. Although in the Hebrew Bible the word is never used as a *nomen proprium* it begins to be so used as early as the apocalyptic literature of the second century B.C., and it is from then on that beliefs were crystallized concerning the coming of a particular or personified "anointed one" as a redeemer. To understand these doctrines it is necessary to realize first of all that the distinguishing characteristic of the Jewish people since its beginnings has always been its consciousness of history, its historical mindedness. For the Jews God is not a God of nature but a God of history. Beyond all other peoples the Jews see in history, in duration and change, the work of one creative force, which fills the constant flow of time with meaning and gives it a direction. From the beginning the Bible is a book of history and this history has its unity in the underlying plan of God, who will carry it out to the end. The basis of all philosophies of history is to be found in the Bible.

Jewish messianism did not like analogous movements elsewhere arise out of mythological speculations; it sprang from living historical experience and it became eschatological, that is to say, projected into the future, through historical disappointment. The original historical experience was later surrounded by myths and legends, as was also the future state projected by messianism. But at the beginning there was only a recollection of the covenant between God and Israel, the memory of an early theocracy in Israel, when God alone was king and the Israelites, His chosen people, had voluntarily taken upon themselves the yoke of His kingdom. These elements of a unique religious experience, an experience real and historical in its essence even though legendary in its coloring, proved so powerful that they not only settled once for all

the history of Israel but dominated the history of many groups and sects for two thousand years. And in however legendary a fashion the future may have been embroidered, its fulfilment was envisaged essentially as a return to the theocracy of the beginning, to the reign of David, the last king upon whom a charismatic commission was laid by God. The messianic future never was in heaven but was always a phase of human history, whose stage was the earth—a transfigured earth sometimes but still the earth, where God alone will be king and life remain a human life, purified and clarified but still human. Just as history is never the biography of one man but the collective life of a group, so messianism meant the salvation never of an individual but always of a group or of humanity. "The ultimate salvation of the individual is inseparably connected with the salvation of the people, and inasmuch as, in accordance with the prophetic teaching, this was made dependent on the righteousness or the repentance of the nation collectively, the conduct and character of the individual concerned not himself alone but the whole Jewish people" (George F. Moore).

Not only does messianism have its roots in the union of national politics with universal religion, in the kingdom of God as it was established by the covenant between God and Israel, but in its preaching for the future it also combines the same elements. It looks forward to the coming of the same kingdom of God which existed in the past—this time, however, in an ultimate form which is never again to be disturbed. The national-political phase of messianism is not prior to or later than the ethico-universal phase. Both are to be found, although with different degrees of dominance, in the same epochs; sometimes both are even found mingled in the same men.

In the national-political phase of messianism the Messiah remained a national hero who was to fulfil the old promise given by God and originally fulfilled by God Himself in the wars of Yahweh in the time of Joshua and the judges. The Messiah will again reinstate the Jewish people in undisturbed possession of Palestine; he will gather the scattered people from all the ends of the world; he will destroy as a great warrior the enemies of Israel; and Israel will reappear in the glory of the strong and powerful reign of David. The salvation (*geulah*) which the Messiah brings is a political salvation for the Jews only. But at the same time the people re-

constituted in their kingdom will lead a righteous life, piety and justice will prevail and God's law will be kept. Messianism meant thus throughout the ages "the will to live dominantly and triumphantly as a rehabilitated people in its national home" (Abba Hillel Silver). In this sense messianism has been one of the dominant forces in Jewish history since the weakening of the secular power of the Jewish state. For two thousand years it was the great hope of the Jewish people, the vision and faith which sustained them in their terrible history of persecutions and humiliations. The Jews prayed daily for the coming of messianic salvation; they bore willingly in this hope the heavy yoke of Judaism; and with thousands upon thousands of martyrs they magnified and exalted their God who had promised to restore the nation to its ancient glory and to inaugurate by the joyful regathering of the people into their homeland His kingdom in perpetuity. Thus the Messiah became for Israel in the dark hours of history *Menachem*, the comforter. In the beautiful old benedictions dating from the earliest days of the Pharisaic synagogue and constituting the *Shemoneh 'Esreh* prayer, which is recited at the three daily services, the fourteenth benediction reads as follows: "And to Jerusalem, Thy city, return in mercy, and dwell therein as Thou hast spoken; rebuild it soon in our days as an everlasting building, and speedily set up therein the throne of David. Blessed art Thou, O Lord, who rebuildest Jerusalem." The next benediction directly prays for the coming of the Messiah, the seed of David: "Speedily cause the offspring of David, Thy servant to flourish, and let his horn be exalted by Thy salvation, because we wait for Thy salvation all the day. Blessed art Thou, O Lord, who causest the horn of salvation to flourish."

The hope for deliverance and for the termination of the Diaspora was so strong that from the end of the Hasmonaean dynasty, when the Messiah had to maintain the independence of Israel against the Romans, until the eighteenth century there was a long line of pseudo-messiahs, who believing themselves to be appointed by God sought to restore the Jews to their ancient kingdom. During the period of Jesus there was a large number of such messiahs in Palestine, and afterward they came forward in many lands and almost in every country; some of them were only of local importance, but some created movements which spread over many countries and unified the Jews in a common hope for a considerable time. The most impor-

tant pseudo-messiah was the Turkish Jew Shabbethai Zebi (1626-76). The outcome of all these messianic movements was always a deep disillusionment, and their effect on Jewish life was in many ways pernicious. Messianism in this politico-religious form died with the growth of modern rationalism in Judaism; but the hope of two thousand years has remained alive and has taken a secular political form in Zionism, which unites the faith of politico-national messianism with the European doctrine of nationalism.

But side by side with this nationalistic messianism there developed from the very beginning the tradition of universalistic messianism. The nation which has been oppressed and humiliated will not only become free and glorious but it will become a light unto the nations, their guide on the road to God, the teacher of the nations of the earth. This seminal universalism, which was to find its echo in the nationalism of many modern nationalists in Russia, Poland, Germany, India and other countries, is already expounded in *Isaiah* II: 2, 3: "... the mountain of the Lord's house shall be established in the top of the mountains, and shall be exalted above the hills; and all nations shall flow unto it. . . . For out of Zion shall go forth the law." A further stage in the universalization of messianism is represented by the idea of messianism as ethical and religious salvation for mankind. The kingdom of God is then understood as a universal kingdom of peace and justice, still a kingdom of the earth but metapolitical. In the oldest period the belief was that God Himself would bring about the redemption, the Messiah, if he is mentioned at all, being only His tool. This belief is expressed in the sublime *'Alenu* prayer, which probably dates from the second century after Christ but which an old tradition claims as being written by Joshua upon his entrance into Canaan: "We therefore hope in Thee, O Lord our God, that we may speedily behold the glory of Thy might, when Thou wilt remove the abominations from the earth . . . when the world shall be perfected under the Kingdom of the Almighty, and all the children of flesh will call upon Thy name, when Thou wilt turn unto Thyself all the wicked of the earth. Let all the inhabitants of the world . . . accept the yoke of Thy Kingdom, and do Thou reign over them speedily, and for ever and ever. For the Kingdom is Thine."

The messianic ideal found its most definite ethico-universalistic concepts in the Hebrew prophets; with many of them the coming king-

dom of God meant a universal reign of peace and justice where the great enemies of humanity, fear and misery, will be banned. Messianic time will bring a redress of present misery. The poor and the persecuted become the truly pious. Messiah, who had been a king, now becomes himself a poor outcast, a symbol of human suffering, who ennobles it by his example. He does not use the noble horse but the ass, the despised riding animal of the poor. He becomes the servant of God (*'Ebed Yahveh*). "He hath no form nor comeliness. . . . He is despised and rejected of men; a man of sorrows, and acquainted with grief" (*Isaiah* LIII: 2, 3). Here is a complete revaluation of values. The man who is weak, poor, despised and ugly will bring about the redemption. And in him are exalted all the lowly and despised on earth. Whatever may be the historical explanation of the *'Ebed Yahveh*, a new epoch of world history begins with this notion. An unflagging unrest breaks into the settled order of the social world: in the name of this unrest, of this messianic dream, the despised and the disinherited will raise their banners again and again in their fight for a new social order. Peace and unity, equality and brotherhood, will become the slogans of all utopias and revolutions, the banners of man setting forth to build the kingdom of God on earth.

Very soon the doctrine becomes general that the coming of the Messiah will be accompanied by great suffering and wars. Catastrophes of an unprecedented character, natural, social, political and moral, will introduce the messianic age, when misery will be at its height because salvation will be close at hand. The Messiah will have precursors who will prepare men for his coming, for the advent of the Messiah is made dependent upon the righteousness of the people. The conviction becomes widespread that by a saintly life one may hasten the arrival of the Messiah. Many sects prepare themselves by ascetic exercises, by communistic brotherhood and by the fulfilment of the law for the approach of the kingdom. The cry, "Repent, for the end is near," is to be heard again and again through the ages.

Messianic time was pictured in the Bible as a time of uncommon fertility, prosperity and longevity (*Isaiah* XXXII: 15-17; LXV: 17-23), but in the apocalyptic literature it was pictured in mythological and supranatural colors. The Messiah was exalted beyond human measure and his conception was mixed with Hellenistic and oriental images.

All these elements of messianic ideas are to be found in the later rabbinical writings. "The conception itself of a Messiah varies so much with individual rabbis and the divergence of opinion with regard to the details is so great that its form remains loose and unlimited" (Julius H. Greenstone). Some of the tannaim "lift themselves through their high ethics and deep piety to such a lofty spiritual plane that everything political becomes inconsequential, and strife and struggle a terrible evil. How could these pious men picture the Messiah as a bloody avenger, as a war hero—they who regarded the use of weapons in and for itself as a weakness?" (Joseph Klausner). They could not accept the idea of the Messiah as someone fighting in God's cause in the manner of a pagan general and could not consider national revenge and independence a good. The last of the tannaim, Jehuda I, even wanted to abolish the fast of the 9th of Ab, the day of Jerusalem's destruction, in order to destroy all memory of Jewish independence. Others, on the contrary, expressed the most coarse and exclusive notions of national supremacy. Many who wished to preserve the Messiah as the prince of peace declared that first a Messiah ben Joseph will come, who will fight the battle against Gog and Magog and be killed in the battle, and that then only will Messiah ben David arrive and with him the messianic age.

Various methods were used to calculate the arrival of the Messiah, the numbers seven and forty playing a great role in those speculations. Since God created the world in six days, it was believed that six thousand years in three ages of two thousand years will pass and then will come the universal Sabbath, the seventh millennium. Many rabbis opposed all such calculations as well as all efforts to force the advent of the messianic kingdom through acts of asceticism and similar means. They bade all men to await the coming of the kingdom with patience and piety.

In the nineteenth century messianism underwent a transformation parallel with the development of enlightened liberal Judaism. The dispersion among the nations was no longer considered a punishment for Israel but an act of divine providence for the realization of Israel's mission, "to lead the nations to the union of all children of God in the confession of the unity of God, so as to realize the unity of all rational creatures and their call to moral sanctification." Liberal Jews, like James Darmesteter, sought to show that the principles of prophetic messianism

were identical with those of the French Revolution.

Early Christianity, as expressed in the preaching of Jesus and in the life of His first followers, was pure messianism. Indeed the appellation *Christos*, or Christ, is the identical term by which the Hebrew word *māshiah*, anointed or Messiah, is translated in the Greek Septuagint. Christianity is thus by its very name a form of messianism. Jesus couched His message in terms understood by all the Jews of His time, who were filled with a feverish expectation of the coming of a Messiah. His prayer was "Thy kingdom come." His task was not the foundation of the kingdom but its preparation: He did not consider Himself the Messiah, but the consciousness grew in Him that He would soon return as the Messiah and inaugurate the kingdom of God. He and His followers were certain about the immediateness of the kingdom (*Matthew* x: 23; xvi: 28; *I Corinthians* xv: 51, 52; iv: 5; xi: 26; *I Thessalonians* iv: 15-17; v: 1-3), and His ethical teaching was focused on the short interregnum between the premessianic and the new age: it preached not an alleviation but a tremendous aggravation of duties in view of the approach of the kingdom.

As the kingdom did not come, however, and as the church had to maintain itself among the powers of this world, the teaching of the imminence of the messianic kingdom was kept alive only in heretical sects. It is here that there is found an uninterrupted, unofficial stream of truly Christian life keeping alive the original doctrine of Jesus through the ages, often in the face of violent opposition from the church and the state. Many of these sects found an answer to their queries about the Second Advent of Jesus in the apocalyptic literature, in *Daniel* and particularly in the *Revelation of St. John* xix: 11-xxi: 8. The *Revelation* spoke of a period of one thousand years to pass before the coming of the Messiah and of a New Jerusalem, and this idea gave rise to many millenarian, or chiliastic, sects, who expected the coming of Christ at a certain fixed date and divided history into various ages and periods.

Messianic movements in the churches were of two kinds: one kind aimed only at the spiritual regeneration of the individual Christian, while the other kind (which was more common) developed sectarian groups in conflict with the church and generally also with the state. Of the first kind the most noteworthy example was that championed by Joachim of Flora (1145-1202),

who wished to realize a church of the Holy Spirit and who expected the Messiah to come in 1260. He distinguished the Age of the Father, or of the Old Testament; the Age of the Son, or of the New Testament, which has led to ecclesiastical corruption and secularization; and the Age of the Holy Ghost, or the Sabbath of Humanity, which was to be an age of full freedom of the spirit with all men given over to prayer and song.

The radical sect movements are to be found in all churches, Catholic, Greek Orthodox and Protestant. Like primitive Christianity they were in many cases a protest of the poor, a desire of the disinherited to enter into their own. These sects upheld with rare courage the principle that man owes obedience to God rather than to men, to the written word of God and the inner light rather than to secular or ecclesiastical authorities. They have been the great conscientious objectors of history. They have been persecuted by the churches, tortured and killed, but their eschatological enthusiasm kindled a fire which was never extinguished throughout the ages. The oldest of such sects is that of the Bogomiles, which originated in Bulgaria during the tenth century and spread from there to both the east and the west. The Bogomiles had no churches, no priests; they practised baptism only upon adults and they believed Christ to be the son of God only through grace like other prophets. They were radical social and political reformers who, like the sects that followed them, fought for human brotherhood, the abolition of private property and the renunciation of war and of the swearing of oaths to other men. They produced a deep influence on the religious spirit of the masses and created a rich popular literature. Another sect was the Cathari, or universalists, who believed in the salvation of all men and saw in the temporal world Satan's world. They took the Gospel and the Sermon on the Mount literally and seriously, led an anarchist life and shunned the killing of men or animals. Abbé Jean Guiraud says that the Catharistic rites "recall those of the primitive church with a truth and precision the more striking the nearer we go back to the apostolic age. In the bosom of mediaeval society the Catharistic rites were the last witness of a state of things that the regular development of the Catholic cult had enlarged and modified." The Catharistic movement was heavily represented in southern France, where Catharists went under the name of Albigenses and Waldenses.

Among the movements of the Reformation period are found the extreme Hussites under their leader Peter Chelčický, a forerunner of Tolstoy; the Adamites; the Moravians; and in the time of Luther the Anabaptists. The last named, under the leadership of Thomas Münzer, joined in the revolt of the German peasantry against the landlords. They made a memorable attempt to establish the kingdom of God on earth according to the Gospel, a true community of Christian saints in absolute equality and brotherhood. "It was easier to burn Anabaptists than to refute their arguments and contemporary writers were struck with the intrepidity and number of their martyrs. . . . The excesses of John of Leiden cast an unjust stigma on the Baptists, of whom the vast majority were good quiet people who merely carried out in practice the early Christian ideals of which their prosecutors prated" (F. C. Conybeare). Anabaptist sects sprang up all over Europe. They were strictly non-violent: the members had no recourse to arms or to courts; they applied no force to evildoers; they accepted no office and no rank in government. They may be regarded as one of the origins of modern socialist and anarchist movements.

In England the great revolution was deeply influenced by the theocratic ideas of the Bible. The Fifth Monarchy Men, a Puritan sect in the days of Cromwell, believed that after the passing of the Assyrian, Persian, Greek and Roman monarchies a fifth was at hand, when Christ would return and reign for one thousand years. At about the same date Manasseh ben Israel argued in his letter to the English Parliament that the readmission of Jews into England would hasten the messianic era. There were also many messianic sects in the Greek Orthodox church, such as the Khlysty and the Skoptsy, the latter believing that the Messiah would arrive as soon as there were 144,000 Skoptsy (*Revelation* XIV: 1). The Molokany and the pacifist Dukhobors may also be mentioned.

Even in the nineteenth century new millenarian sects were founded, like the Christadelphians, who hoped for a world wide theocracy with Jerusalem as its center, and the Templars, mostly Württemberg pietists, who went to Palestine to await there the Second Coming of Christ. But as a whole messianism assumed in the nineteenth century a new form. The ideals of universal peace, natural and equal rights, an equal distribution of wealth and an economic life in common grew out of the old theocracy of the

kingdom of God, but they took on a secularized, rationalized form. What had once been believed on the authority of God's word became now a subject of social science and philosophy of history. But the old messianic hope and fervor did not die in the new atmosphere. Lessing spoke of the education of mankind toward the messianic kingdom, making messianism the result of an immanent process of history. Ibsen spoke of the "third kingdom," of a new age to come. Both utopian and scientific socialism have carried the spirit of the struggle for the kingdom of God into our time. Often bitterly opposed to the church and to religion, they nevertheless have sometimes been truer to the legacy of prophetic messianism and early Christianity than have the official religious bodies. A Russian philosopher has aptly called Bolshevism an attempt to establish the kingdom of God against God.

Even messianism in its narrow politico-nationalist form has found many disciples amongst the modern nations. The Slavophile writers in Russia, particularly Dostoevsky, have transferred the messianic concepts from Israel to the Russian people. Many of them have even seen in the Russian nation the Messiah, the *'Ebed Yahveh*, who is suffering for the sake of all other nations and who will some day be exalted over them. During the time of Poland's national subjection Polish philosophers like Wroński, Towiański and Cieszkowski and poets like Mickiewicz, Slowacki and Krasiński developed a messianic philosophy of history with Poland as the Messiah of the nations. They saw in the Poles the people chosen by God for bringing about the messianic age as they had formerly been chosen to fight the battles of Christianity against the heathen Turks. With the dominance of nationalistic ideology in the nineteenth and twentieth centuries many nationalist thinkers believed that their own nation was destined through its moral and intellectual predispositions, through the history of its body politic and its spiritual life, to bring about a new order of things and to raise humanity to new ethical standards. The personal Messiah is thus replaced, as it often was in Israel, by a whole nation as Messiah. The nation transcends the limits of a social or political concept; it becomes a holy body sanctified by God; and nationalism is no longer a political loyalty which can be changed according to social circumstances or convictions but becomes a religious duty full of responsibility toward God and the redemption.

The messianic idea and messianic movements

are also represented in Islam under the name of mahdism. As in Judaism, messianism arose with the Mohammedans out of historical expectations and disillusionments. The idea of a Mahdi was unknown to Mohammed and his first companions; it was conceived only under Jewish and Christian influences during the civil wars and religious controversies attending the rise of the dynasty of the Omniads. The subsequent development of the caliphate and the decline of Moslem piety and power evoked a belief in the golden age of Islam, the reign of Mohammed and the first four caliphs, and a longing for its restitution. Many Moslems believed that the lack of piety had brought about the increase of injustice and the decline of power of the caliph and of the faithful. They hoped that when injustice will have reached its acme the Messiah, called Mahdi, the rightly directed or guided, will restore the ancient glory and open a reign of piety and justice. The theory of mahdism has not been generally accepted in the Sunna and had not become a fundamental dogma of orthodox Islam, but it has become the central idea of the Shiites, a sect who remain faithful to the caliphate of 'Ali, the son-in-law of Mohammed, and his descendants. In their desperate hope and fight against the later caliphs, whom they regarded as unlawful usurpers, they have clung to the expectation of a redeemer who will crush injustice and reinstate the true spirit and power of Islam under its lawful head. They believed that one of 'Ali's descendants, whom they preferred to call imam, or spiritual leader, instead of caliph, has hidden himself away and will return one day as imam Mahdi. Shiite sects were often constituted according to the belief in the particular descendant of 'Ali who is expected to return as a deliverer out of his hiding. Thus there are, for instance, believers in the seventh and in the twelfth descendant of 'Ali as the imam Mahdi.

The imam is in the doctrine of the Shiites a being of more than human qualities, the "golden link between God and men." He is free from all sins and is infallible. Some Shiite sects have even seen in their imam and Mahdi forms of divine appearance. The imam Mahdi is a source of all knowledge and the goal of all longing. Even in the Sunna literature the Mahdi has been surrounded with much poetic and mythological speculation. As in later Judaism pious authors tried to calculate the date of his coming by cabalistic interpretations of certain parts of the Koran. It has been generally accepted that the

Mahdi as fulfiller of Mohammed's prophecy has to come from the prophet's family and to bear his name, Mohammed ibn-'Abdallah. But the Mahdi was never considered otherwise than as a guardian of the teachings of Mohammed, which have been corrupted by human inadequacy; he was not considered the prophet of a new salvation superseding or altering Mohammed's doctrine and laws.

There is also to be found an equivalent to the Jewish pseudo-messiahs in Islam. Many mahdis appeared in Moslem history, particularly in Morocco and India, and tried to legitimize or sanctify their political or personal aspirations by assuming the role of a Mahdi. Often they personified the popular hopes of oppressed or disillusioned races or sects. Some declared themselves as mahdis; several were proclaimed as such by their followers; others proclaimed themselves only as forerunners of the Mahdi. Few have had any great importance or produced lasting effects. The most important examples of mahdism in history were al-Mahdi 'Ubaidallah, who founded the dynasty of Fatimites; Mohammed ibn-Tumart, a Berber of north Africa; and Mohammed Aḥmad ibn-Saiyid 'Abdallah, the Mahdi of the Sudan.

The Mahdi idea and the Mahdi movements occupy an important place in Islam, but they have never attained either in profundity of thought or as a historical force the great and lasting significance which messianism exercised in Judaism and in the Christian Occident. With the penetration of secularism and critical rationalism into the Moslem countries mahdism is bound to lose its importance in the religious as well as in the political field.

HANS KOHN

See: RELIGION; RELIGIOUS INSTITUTIONS; JUDAISM; CHRISTIANITY; ISLAM; CULTS; SECTS; MYSTICISM; MYTH; NATIONALISM; DIASPORA; CHASSIDISM; ZIONISM; PROGRESS.

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MESTA. See WOOL.

METALS

ANCIENT, MEDIAEVAL AND EARLY MODERN. As the use of tools is one of the marks which distinguish man from the lower animals, so the use of metals may be regarded as a milestone on the road from savagery to civilization. Any approach to modern civilization would have been impossible had the working of metals not been discovered, although complex social systems, far from contemptible in art and ethics, have been evolved in many parts of the world, at widely differing dates, without knowledge of metals.

For unknown thousands of years men depended for their tools and weapons upon stone and wood and bone, all of which they learned to handle with great skill. Gold was the first of the metals to be utilized. One of the most widely distributed of all metals, it is found in a pure state, requiring no skill to reduce it from its ore, is easily shaped by hammering with stones and retains its glitter untarnished. But its softness renders it valueless for practical purposes, and its discovery therefore had no inherent evolutionary importance. It is highly probable, however, that the erroneous identification of native copper, which is sometimes found pure in lumps of considerable size, as a kind of gold led to attempts to fashion this material into ornaments. As copper becomes hardened by hammering and can be brought to a sharp edge, it must soon have been discovered that here was a substance with infinitely greater possibilities than stone for the making of tools and weapons.

The next step was the discovery of smelting, which must have been accidental; presumably camp fires, built round with stones containing copper ore, would from time to time reveal runlets and lumps of copper among the ashes, until at last it dawned upon men's minds that this valuable material could be obtained by heating such stones. Once such an idea had been grasped, the quantity of copper available would be enormously increased, as deposits of copper ore are vastly more common than lumps of native copper. Moreover these deposits frequently contain such impurities as antimony, zinc or especially tin, the presence of which converts the smelted metal into a form of bronze, which is harder than pure copper and more satisfactory for mechanical purposes. While this superiority must have been obvious at once, its cause would not be suspected; and generations of observation and experiment must have been required before the development of deliberate manufacture of bronze from an adjusted mixture of copper and tin.

Excavations suggest that objects of copper were known in Mesopotamia and Egypt before 4000 B.C. and that bronze of a kind was produced by the accidents of smelting in Asia Minor, and possibly in mid-Europe, about 2500 B.C., the general date accepted for the beginning of the true bronze age in Europe being about 2000 B.C. (Among the Mexicans and Peruvians the bronze age came much later than in Europe, but it possessed the same general characteristics.) One great bronze center at this time was

at Hissarlik, more famous as Troy, on the Dardanelles; the ships of the Cretan traders carried the bronze throughout the Mediterranean, probably bringing back tin from Spain for its manufacture. Trade routes across Europe had been developed centuries before this, as is shown by the presence of Baltic amber in early Egyptian tombs; and bronze speedily found its way even to distant Britain, while eastward the secret of its preparation penetrated as far as China in the course of the next two centuries. Bronze, however, did not replace stone for common use; it was always costly and practically confined to the weapons and ornaments of the wealthier classes; even in the army of Xerxes (490 B.C.) some of the contingents were armed with spears and arrows tipped with horn and stone.

The tomb of Tutankhamen has revealed the prodigious metallic wealth of Egypt in 1350 B.C. Among the splendors of gold, copper and bronze was one very significant object, lying close to the body of the king—a dagger with a blade of iron. Isolated discoveries have been made in Hissarlik, Mesopotamia and Egypt of iron objects—usually beads and ornaments—dating back at least as far as 3000 B.C., but the metal was clearly of great rarity; and all this early iron may safely be assumed to be meteoric. Practically the only form in which native iron is ever found is in lumps which fall from the skies. Such meteoric iron is malleable and, because of its nickel content, of high quality, resembling steel. Evidence, literary as well as archaeological, shows that this material was used and highly valued. Its celestial origin may partly account for the supernatural properties attributed to iron. In folklore, particularly of northern Europe, iron has a talismanic value. The horseshoe is lucky not merely because of its shape, but also because it is of iron. Fairies, trolls and evil spirits of all sorts are powerless in the presence of iron.

The coming of the real iron age (about 1200 B.C.) gave a great advantage to those races which first exploited the new metal, an instance of which may be seen in the Old Testament story of how the Philistines kept the Hebrews in subjection in the days of King Saul by not allowing them to have weapons of iron or even smiths in their country. Many writers have found it difficult to believe that so long a time should have passed between the first smelting of copper and the smelting of iron—a metal of which the ores are spread more widely and are more easily reduced than those of copper. But Rickard has

pointed out that, while copper ore accidentally reduced in a camp fire would yield an obvious shining metal, iron ore would produce a lump of uninteresting black matter, coated with slag, which would reveal its value only with hammering. On the whole, it seems probable that iron smelting was the result of experiments with ores, such as hematite, which the workmen judged from their weight to be metallic and which they very likely thought would produce copper.

Iron as at first produced, although it was an advance over bronze, was still too soft; but by the time of Homer the smiths had discovered how to harden it by quenching the hot metal in water and had also found that it could be case hardened by heating in contact with charcoal. Iron was in general use all over civilized Europe by the time of the Roman Empire. Despite their considerable manufactures of iron and steel the Romans imported steel from India, where the ironworkers of Hyderabad manufactured steel of a high quality from a very early date. This was the "Seric iron" to which Pliny alludes.

The primitive method of smelting ores of copper, tin and iron was to form a shallow, bowl shaped hole in the earth and line it with clay. Here a fire of wood and charcoal was kindled and alternate layers of washed and broken ore and of fuel were heaped over the fire, to which additional draft was supplied by bellows, usually worked with the feet, with a clay nozzle resting on the edge of the bowl. The metal accumulated at the bottom of the hearth and, after the fire and slag had been raked aside, the molten tin or copper could either be ladled into molds or taken out as a solid lump. The heat obtained in this type of hearth was not enough to render iron fluid, so that cast iron was not obtained except by accident. Therefore the lump of viscid iron, with slag and other impurities adhering to it, had to be wrought by laborious hammering and reheating. These simple methods remained in use in Japan until fifty years ago and are still employed by natives in Africa and elsewhere.

Similar methods were used also for smelting lead, a metal which must have been known from very early times, for while it is not found in a free state, its commonest ore, galena, is noticeable from its weight and glitter and is easily reduced. But since lead is too soft for practical use and possesses little merit except weight and easy fusibility, it was employed chiefly for weights and missiles and for such purposes as fastening iron clamps into buildings and in later

times for pipes and roofing. In early times it was important chiefly because it almost invariably contained silver, which, having a much higher melting point, could be extracted by volatilizing the lead, so that much lead was destroyed for the sake of its silver content. Although native metallic silver is often found on the American continent it was much rarer in the Old World, and, as it was from early times valued next to gold for decorative purposes, the ores containing it were eagerly exploited. In Asia Minor and Mesopotamia silver was in use almost as early as copper, but in Europe it was very rare until the later iron age, except in districts, such as Spain and Hungary, where the ore was particularly abundant. Some of this early silver may have come from outcrops of cerargyrite (silver chloride), which is easily reduced by charcoal; but most of it was derived from galena ores by cupellation. The galena was first roasted on an open hearth and then smelted in the same type of furnace as that used for copper. To extract the silver from the lead so obtained a refining, or cupellation, hearth was formed, consisting of a shallow concave hearth lined with bone ash or other absorbent material. A charcoal fire was kindled, on which the lead was placed; when it was molten, the fire was scraped aside and a blast of air directed on to the lead, which was thus converted into oxide, or litharge. The litharge was partly scraped off and partly absorbed by the bone ash, leaving the silver; the litharge was subsequently resmelted to obtain the lead.

The ancient world, including India and China, attained great proficiency in the working of metals. Artists used their skill in the making of gold and silver plate, jewelry and other objects. Statues of enormous size were cast in bronze. A process was perfected by which bronze was hardened and hammered into extremely sharp cutting edges. Smiths, increasingly improving their craft, produced better and cheaper swords, spears, hooks, scythes and other implements of war and peace—but particularly of war. There was a corresponding improvement in the tools used for the working of iron. Roman Italy gradually became the great center of metal manufactures.

The stimulus given to trade by the discovery and working of metals can scarcely be overestimated. Countries requiring metal and metal products could obtain them, apart from plunder, only by giving in exchange other articles of their own growth or manufacture. The first of the

great traders on the Mediterranean were the Cretans, who from about 2000 to 1400 B.C. carried oil, wine, corn and other products of their island and accumulated vast quantities of gold, which their goldsmiths wrought into goblets, cups and jewelry of unsurpassed beauty. Their rivals and successors were the Phoenicians, whose cities of Tyre and Sidon became the great centers of trade from about 1200 to 700 B.C. The first of their ships to reach Spain obtained such masses of silver that they replaced the lead of their killicks with the precious metal. In 1100 B.C. the Phoenicians founded a colony at Gades (now Cádiz) in the district of Tarshish and exploited the metallic wealth of Spain. More than a century later their king Hiram was supplying David and Solomon with gold for the adornment of the Jewish temple in quantities so great that Solomon in return made over to Hiram fifty "cities," or villages. This gold came from the mysterious "Ophir," which seems to have been Arabia or Abyssinia. The Phoenicians were bold sailors; their ships reached India in the east, sailed on at least one occasion round Africa and appear even to have penetrated to the Baltic. They traded for tin with the natives of the Cassiterides, or Tin Islands, by which Cornwall appears to have been meant. It is not certain, however, that the Phoenicians made a practise of going there themselves; it is more likely that the natives shipped the tin to Corbilo, at the mouth of the Loire, whence it was carried down the Garonne and so to Narbonne, as was certainly done in later times. After Tyre and Sidon had been crushed by Persia in 538 B.C., the Phoenician colony of Carthage on the bay of Tunis became mistress of the sea. Its power was founded on the wealth wrung from the mines of Spain and Sardinia by the most ruthless use of slave labor; and it was chiefly the desire to seize that wealth that made the Romans, whose own country was poor in metals, enter upon the bitter struggle which ended in the annihilation of Carthage.

Meanwhile somewhere about 700 B.C. there had occurred in Asia Minor an event of great economic importance—the first definite issue of coins (*see* COINAGE). The first issuers of coins are believed to have been not kings but wealthy traders; the distinction between kings and financiers was not sharply drawn, for there is good reason to think that the early tyrants of the Levant were merchant princes, men who grasped the possibilities of the invention of a new metal currency. Such were Midas, whose fabled touch

turned all things to gold; Croesus; Polycrates, tyrant of silver bearing Siphros; and Peisistratus, who made himself tyrant of Athens with the help of the mines and miners of Laurium. Even in later times the Macedonian dynasty of Alexander the Great owed its rise to the mines of Thrace; and the Attalid kingdom of Pergamum, where Greek art flamed up for the last time before its extinction, was based on mineral wealth. In the later days of the Roman Empire the precarious position of emperor was more than once openly sold to the highest bidder; its pale shadow, the crown of the Holy Roman Empire, was bought in 1257 by Richard, Earl of Cornwall, with wealth derived from English tin mines; and if the great firm of Fugger wore no actual crowns, the money they drew from mining ventures in Germany and the Tyrol enabled them to seat Charles v on the imperial throne, not without profit to themselves. The course of history was changed when at Salamis the navy of King Xerxes was shattered by the ships of Athens, built with wealth derived from the state mines of precious metals of Laurium. In addition gold and its coinage greatly influenced commerce.

It is not easy to estimate the influence of the non-precious metals in history. Obvious though it may seem that weapons of bronze are superior to those of stone and weapons of iron to those of bronze, the personal element is so much more important than the material (or was before the advent of firearms) that it is doubtful if any ancient kingdom owed much to the superior material of its arms. A strong man with a club may be a match for the unskilled wielder of the finest blade ever forged in Toledo; and King Pyrrhus, after staggering the armies of Rome, was killed by a well aimed brickbat. The swords of the Britons may have bent upon the shields of the Roman invaders, but it was the discipline rather than the weapons of the legionaries that gave them victory. So far as iron affected warfare it was chiefly in the development of body armor, which in course of time permitted the knights to achieve honor at very little risk to their lives and restricted bloodshed to the humbler ranks, until indiscriminating gunpowder restored the balance. In the arts, while the sculptures of Phidias or Michelangelo could not have been achieved without metal tools by the early Egyptians, the pre-Columbian natives of Central America and such races as the Maori suggest that art is not wholly dependent on steel. It is

easier to see how the metals lent themselves to the service of art in the exquisite goldsmithry of Egypt and Chaldea and thirteenth century Europe, the ironwork of Moorish Spain, the brass of India and the bronzes of China, Japan and Renaissance Italy. But it is in the humble sphere of everyday life that iron has played the greatest and most beneficent part. Iron plowshares, spades, axes, horseshoes and nails did more to raise the standard of human life than all the swords of Damascus and sculptors' chisels ever forged. The village blacksmith was the outstanding craftsman in the mediaeval manorial community, and his just pride in his craft is reflected in the number of families which adopted Smith as their surname.

The fall of the Roman Empire was accompanied by a decline in metallurgy, which, however, continued to flourish in Byzantium. There was nevertheless some progress in smelting during the Middle Ages; it became customary to build over the hearth a low tower of stone in the shape of a truncated cone, like a limekiln, the open top of which served to charge the furnace and as a vent for the fire. About the middle of the fourteenth century water power for driving great bellows was increasingly used in Spain and Belgium, spreading to Germany and England in the next century. This enabled a much fiercer heat to be obtained and it became possible to produce cast iron, which could be run out from the bottom of the hearth and cast in "sows" and "pigs." Such iron was too brittle for most purposes and had to be reworked in the forge under a water driven hammer. All through the Middle Ages there was a demand for a variety of steel yielded by the manganese iron ores of certain regions, such as Spain and Sweden. Tools were never made wholly of steel because of its high cost, but a piece of steel was welded on to the iron to form its edge. Weapons of better quality were forged from steel, the armorers of certain districts, notably Cologne, Milan and Toledo, acquiring fame and wealth from their skill. Still earlier the swords of Damascus had earned a great reputation. There were many improvements in the large variety of tools, including sledges and modeling hammers used in metal working. The Renaissance gave a great impetus to artistic metal work both in bronze and iron; architecturally iron was first used for protective and later for decorative purposes, receiving the highest artistic expression in Spain. Germany developed a considerable export of iron implements. During the fifteenth

and sixteenth centuries the mining of metals increased greatly; it was stimulated particularly by the demand for firearms, the manufacture of which resulted in great technical improvements in ironworking.

The increase of trade during the thirteenth century necessitated a gold coinage. Florence struck gold florins in 1252, Venice followed with ducats and sequins in 1286; France issued a gold coinage in 1295 and England in 1345. The chief sources of gold were now the mines of Silesia and the neighborhood of the Black Sea, while silver was obtained from Bohemia, Hungary, Tyrol, the Harz mountains and elsewhere. All through the Middle Ages the rulers of Europe scrambled for bullion for their mints; attempts were made even to provide it by alchemy, the transmuting of lead into gold, but no gold was produced, although in the course of the search alchemy itself was transformed into the nobler science of chemistry.

The continued attrition of bullion, by export to the East and by conversion into plate and jewelry to meet the luxurious ostentation of the Renaissance, was one of the chief motives for the attempt to find a sea route to the fabulously rich gold lands of "Cipango" and "El Dorado," which resulted in the discovery of the continent of America. The first period of the conquest of Mexico and Peru was one of simple plunder. The cargoes of bullion which flowed into and through Spain were the product of ornaments found in the palaces and graves of the chiefs. The natives attached no commercial value to gold and silver and could not understand the madness of men who seized their beautiful ornaments only to destroy them by melting them down. When these supplies of gold and silver ran short, the Spanish invaders began to exploit the mines with the forced labor of the natives and later of Negro slaves. During the first fifty years after the discovery of America some \$85,000,000 of bullion—mostly gold—was sent to Spain. Then came the opening of the silver mines at Potosí, in which a new process of extracting the metal by amalgamation with quicksilver was employed, to the enrichment of the Fuggers, who had leased the quicksilver mines of Almadén in Spain, the only important deposits of that substance then known. The average annual yield of Potosí was about \$20,000,000. It has been calculated that the stock of monetary metal in Europe rose from \$175,000,000 in 1492 to \$650,000,000 in 1600.

The natural result of this flood of coin was

to send prices leaping up and to give a great impetus to the development of trade and manufacture, bringing down in ruins many social and industrial survivals of the feudal past. The mines of Europe shared in the boom. In England under Henry VIII and again under Elizabeth German miners were called in to organize the copper mines; in Russia about the same time the mines of the Urals were exploited under German and English direction; and when the Strogonovs conquered Siberia in 1574 they received a grant of the gold and silver mines, and by 1584 they were employing 15,000 miners. In Germany itself mining reached a high degree of skill. But the increased output of ore meant an enormous consumption of wood for fuel; many districts were completely denuded of their timber, with disastrous results in the reduction of rainfall. In England the security of the country was threatened by the destruction of oak required for building the navy, and no multiplication of iron cannon could compensate for lack of ships in which to mount them. The remedy lay in discovering some way in which mineral coal could be used for smelting iron, and this was finally accomplished about 1709 by Abraham Darby (*see* IRON AND STEEL INDUSTRY). The revolution in metallurgy was a decisive aspect of the industrial revolution, whose technology made great demands upon metals, particularly iron.

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MODERN. Economic developments after the industrial revolution made great demands upon metals. While the greatest demand was for iron—the world output of pig iron rose from 460,000 tons in 1800 to nearly 100,000,000 tons in 1929—other metals also became increasingly necessary; in the same period the output of copper rose from approximately 18,000 tons to 1,900,000 tons, of lead from 24,000 tons to 1,788,000 tons and of zinc from 582 tons to 1,460,000 tons. The growth of metal consumption has been especially great in the past fifty years; thus the value of metal production in the United States rose from an annual average of \$191,000,000 in the years 1881 to 1885 to \$1,476,000,000 in 1929. Machinery and other types of industrial equipment, railroads, steamships and bridges, new forms of construction, all absorbed continuously greater supplies of metals; and the demand was strengthened by an increasing and varied production of metal consumption goods. Electricity augmented immensely the use of

copper, while the development of industrial chemistry called for large supplies of "chemical metals." These changes were accompanied by progress in extractive and refining methods; the advent of new processes, such as electrometallurgy; improvements in the quality of metals, particularly in the form of alloys; and the discovery and technological utilization of many new or rare metals, such as vanadium, tungsten, manganese, nickel, chromium and aluminum. Industrialism may aptly be called a metal economy.

In their modern technological uses metals may be classified into three major groups: structural metals, power transmission metals and chemical metals. The lines of demarcation, however, are not always clearly defined. Copper, the most important metal in power transmission, is used also as a structural metal. Iron, the major structural metal, can be employed for power transmission, as it was in Europe during the World War, when copper was scarce. Silver, which has the highest electrical conductivity, is never used for power transmission because of its cost and the comparatively small amount produced. Many "rare" metals are employed much more as chemical compounds than in their elemental metallic forms. Nevertheless, the technological classification according to use is substantially correct and of practical importance.

A metal passes through many stages before it reaches its final form. The mining and preparation of the ores are followed by smelting, which in the case of many metals is divided into a number of phases, and then by refining, which is being increasingly accomplished by electrochemical and electrothermic methods. The metal is then worked into semifinished and finished products. Compared to the processing of other industrial materials, such as wood, the treatment of metals is relatively complicated and protracted. The length of processing also affects the economic importance of metals, which is considerable even before the metal is worked at all. The many auxiliary industries involved require apparatus and machinery on a large scale: ore mining equipment, smelting and refining furnaces, huge electrolytic plants, rolling mills and foundries and the frequently enormous machinery used in the manufacture of finished metal products.

Mining and production of metals are very widely distributed, a fact which complicates the problem of location. This problem involves very different factors in various countries; it is there-

fore impossible to fix a common economic denominator for the world's metallurgical industries. It is obvious that antimony mining in China, for example, is carried on under wholly different economic, technical and geographical conditions from those in the United States. The United States moreover not only consumes its own antimony output but also imports appreciable quantities of Chinese antimony. Thus the history of two blocks of metal may be very different, although there is no difference in their chemical or physical properties. The differences in origin are "burnt out," as it were, in the fire of the smelting process, but their economic importance remains a significant fact.

The problem of location involves a choice between centralized and decentralized smelting. There is a powerful trend toward the establishment of highly centralized smelting plants. The location of these plants is not, however, always determined by purely economic considerations; frequently there are considerations of military and governmental power. The advocates of decentralized smelting assume that wherever possible only the most valuable materials should be transported; in other words, that no raw materials containing high percentages of worthless matter should be shipped. Raw ores often contain only an extremely small proportion of the requisite metal, and the shipping of such ores involves heavy loading and transportation charges. It follows therefore that every mine, or at least every mining area, should be equipped with the necessary smelting plants; only the finished metal should be transported long distances. This procedure is, however, followed in but relatively few cases; ordinarily the ores are merely sorted or reduced to concentrates with a comparatively high metal content, thus diminishing useless freight handling. Basing their argument upon the present stage of development the advocates of centralized smelting maintain that it is much more advantageous to erect large smelting plants in the major consumption areas, thus supplying the market directly with the finished metal, and that this more than outweighs the disadvantages of the admittedly high freight wastage. The advocates of centralization are stronger today than their opponents, whose influence is, however, far from negligible. The problem of whether smelters should be erected in the mining areas or in the major areas of consumption is being affected more and more by the question of power supply. With the growing use of electricity in electrolytic metal refining the decisions

as to location are being increasingly affected by the availability of power. When the Aluminum Company of America, for example, erected the largest aluminum plant in the world on the Saguenay River in Canada and not in the United States, it did so largely because of an abundant supply of cheap power. The availability of cheap hydroelectric power has made Norway an important producer of aluminum, although that country has no other resources for producing the metal. Surplus power will probably lead to the establishment of a huge electrolytic zinc plant in Magdeburg, Germany. The problem of power is not governed, however, solely by hydroelectric considerations. In many cases, as in Germany, brown coal, or lignite, is still the cheapest source of electric power. When the power problem is cited for or against centralized or decentralized smelting, this can never be considered as a matter of principle but must always be related to the particular conditions under which the cheapest possible method of metal production is sought. Neither transportation nor power alone decides the location of smelting plants.

Available metal resources have played an important part in the tempo and degree of a country's industrialization; countries deficient in metals, such as Italy, have lagged behind, while abundant resources of nearly all the basic metals have constituted an important factor in the intensive industrialization of the United States. At first the more industrialized countries exploited primarily their own metal deposits; then, because of diminishing domestic supplies or in order to obtain metals unavailable at home, they began to draw upon other countries. The trade in metals acquired an increasingly international character, and metals more and more were traded on a futures basis on the exchanges in London, New York, Berlin and Hamburg. Rapid growth in the output of metals has been accompanied by more or less chronic overproduction with frequently disastrous effects on prices and profits.

Iron. The "iron investment" of the world has advanced tremendously during the past fifty years. This investment depends upon ever larger demand and the effective duration of iron in use, especially upon the proportion of losses due to corrosion and other causes. It is estimated that iron and steel used in industry as a whole become scrap after twenty to twenty-five years. The life of iron varies according to the uses to which it is put and is being prolonged by improvements in manufacture and utilization.

In the field of railroads, for example, the durability of rails and ties has been considerably increased; in addition old rails and ties are often used as supporting material in mines. Bridges last much longer than twenty-five years, as do other structures, such as blast furnace hoists, while the effective life of machinery also has been increased.

Only in railroad construction has the consumption of iron shown no upward trend in recent years. This was to be expected, as the railroad network of the highly industrialized countries had reached so high a stage of development even before the World War that new construction could no longer proceed at the former rate; and the slowing down has since been seriously affected by the competition of automobiles. The industrialization of such countries as India, China and, above all, Soviet Russia will again increase the world consumption of iron for railroad construction, although these countries may be able to meet their own iron requirements to a surprisingly great extent. Iron consumption, however, continues to grow in other than the railroad industry. There are close links besides consumption between the iron and other industries; thus in some countries combination has proceeded to the point where certain iron and steel concerns, for example, the Skoda works in Czechoslovakia, manufacture automobiles, supply them with fuel (benzol produced from by-products of coke ovens) and furnish tar for road construction.

The principal raw materials of the industry are iron ore, iron scrap, coke and various kinds of lime products. Old dumps of slag rich in iron from bloomery hearths, refineries and puddling furnaces are also smelted. Other raw materials are the residues of sulphuric acid manufacture from iron pyrites as well as residues of coal tar dye manufacture (iron oxides); each of these materials has an iron content ranging from 55 to 65 percent. The most important raw materials, however, are iron ore and scrap.

Since 1913 there have been no important changes in the production of iron ore, except for the decline of the German and the rise of the French output as a consequence of the acquisition of the Lorraine reserves by France (Table 1). In most countries the iron ore deposits are largely controlled by the iron and steel concerns. Both the United States Steel Corporation and the Bethlehem Steel Corporation own iron deposits at home and abroad (Cuba, Brazil, Chile). In 1928 the ore mined by United States

TABLE I
PRODUCTION OF IRON ORE, 1913-30
(In millions of metric tons)

	1913	1928	1929	1930
United States	62.9	63.2	77.4	59.3
Cuba	1.6	0.4	0.7	0.2
Chile	0.01	1.5	1.8	1.7
Newfoundland	1.5	1.6	1.5	1.2
Germany	35.9	6.4	6.3	5.7
France	21.9	49.2	50.7	48.5
Luxemburg	7.3	7.0	7.5	6.6
Great Britain	16.2	11.4	14.0	11.8
Spain	9.8	5.7	6.5	5.5
Sweden	7.4	4.6	11.4	11.2
Russia	9.5	5.8	7.2	10.1
India	0.3	2.0	2.4	1.9
China	0.9	2.0	1.7	1.7
Algeria	1.3	1.9	2.2	2.2
Czechoslovakia	—	1.7	1.8	1.6

Source: Germany, Statistisches Reichsamt, *Statistisches Jahrbuch für das Deutsche Reich*, 1932 (Berlin 1932) p. 55^a.

Steel from its own mines and mines under its control totaled over 26,000,000 metric tons, or more than 40 percent of the aggregate American production of 63,200,000 tons. The ownership or control of foreign mines is general among the iron and steel concerns of the highly industrialized nations. German concerns had large interests in the Spanish iron ore fields before the World War; but during the war most of these passed into the control of British corporations, which now dominate Spain's iron ore mining. There are minor German interests in Sweden and Norway. The Swedish ore trust (Grängesberg-Trafik A.B.) is controlled in part by the government, and this control may eventually become complete through contractual transfer of shares to the government. The Swedish interests are indirectly involved in several north African mines, which are otherwise controlled by French corporations. There are no international iron ore agreements, but iron and steel concerns without enough ore of their own usually have long term contracts with foreign mines.

Because of the world's uneven industrialization and distribution of iron reserves there is a considerable foreign trade in iron ore. In 1929 seven countries imported 46,435,000 tons of iron ore, the major importers being Germany, 16,953,000 tons; Belgium, 14,125,000 tons; England, 5,780,000 tons. The major exporters were France, 16,405,000 tons; Sweden, 10,899,000 tons; Spain, 5,595,000 tons. The United States imported 3,190,000 tons and exported 1,325,000 tons.

Since the beginning of the present century production of steel in the open hearth furnace

has helped to make possible the reemployment of old iron, or scrap. Scrap is highly prized, not only because of its comparative cheapness but also because as a raw material it is in most cases practically pure metal. Scrap iron is of the greatest importance in countries with little ore of their own, such as Germany and Italy. It is also used in huge quantities in the United States, despite the country's abundant ore; the American railroads alone, which are six times as great as the German lines, supply tremendous quantities of scrap. In addition there is the scrap obtained from house and factory wrecking, which is done on a much larger scale in the United States than in Europe, from the annual replacement of millions of old automobiles and from other sources. In Europe the scrap surplus countries, under normal economic conditions, are France, Scandinavia and England; while Germany, Italy, Poland and Czechoslovakia are large scale importers. Germany is one of the largest scrap consumers in the world. Despite its large surplus France has put scrap exports on a quota basis, most of its exports going to the Italian market. Czechoslovakia, Poland and Austria have all imposed strict prohibitions on scrap exports. Scrap is traded internationally on a large scale; its prices are much more subject to fluctuation than the prices of iron ore, which are usually fixed by long term contracts.

The production of pig iron, obtained from the two raw material constituents, ore and scrap, has risen markedly during the past decades, keeping step with technical and economic advances. The course of the foreign trade in pig iron during recent years has been characterized by the severe export losses of Great Britain and Germany and the gains of France and India as compared with pre-war figures. It is significant that for some years British India has been able to export much more pig iron than Britain, which only a few decades ago almost dominated the world market. Europe and the United States will find it hard to combat this development even with the aid of protective tariffs. During recent years India's exports to Germany, Britain and the United States have grown to unprecedented proportions despite all tariffs and anti-dumping measures. Another important development is the fact that Japan, hitherto the largest importer of Indian iron, is depending more and more on its own exploitation of Manchurian iron ore deposits; so that it is likely that Indian iron will be shipped to Europe and America in increasingly larger amounts.

Copper. Among non-ferrous metals the production of copper ordinarily exceeds that of any other metal. In 1880 the world production of copper totaled only 225,000 metric tons. In 1929 the mining output of copper was 1,941,000 tons (Table II), an increase of nearly 1,000,000 tons over 1913, although in 1921 the world output declined to 527,000 tons. On a continental basis the changes are extremely significant. While the European output rose only slightly, that of the other continents, particularly South America, increased greatly. Of the individual countries the United States experienced the largest gain in output.

The principal sources of copper are copper ores, copper pyrites, copper waste and all sorts of scrap copper. Compared with iron ore the metal content of copper ores is extremely low, most ores containing only from 1 to 3 percent of metal, while few ores have more than 6 percent. Whether it pays to work copper deposits does not depend primarily upon the copper content (which must not of course fall below a certain minimum) but upon the geographical location, possibilities of extraction and chemical composition of the ore. Ores of very low metal content, which can easily be concentrated, are more profitably worked than ores with a some-

TABLE II
PRODUCTION AND CONSUMPTION OF COPPER, 1913-30
(In thousands of metric tons)

	MINE PRODUCTION				SMELTER PRODUCTION				CONSUMPTION, CRUDE			
	1913	1928	1929	1930	1913	1928	1929	1930	1913	1928	1929	1930
Spain	44.9	54.2	63.7	58.4	24.0	20.6	21.3	16.2				
Germany	26.8	26.8	29.1	27.2	41.5	48.5	53.6	59.2	259.7	253.7	216.4	185.8
European Russia	33.7	18.0	25.0	30.0	34.3	18.2	25.0	30.0	40.2	48.6	55.1	55.0
Great Britain	0.4	0.1	0.1		52.2	15.5	17.2	17.4	140.4	158.6	153.8	150.6
Italy	2.1	0.8	0.9	0.9	2.1	0.8	0.5	0.3	30.9	77.2	55.0	50.9
Sweden	1.0	0.6	1.1	0.8								
Austria*	4.1	3.0	2.1	2.2	4.1	3.4	3.9	4.1	39.2	17.8	17.1	12.3
France					11.9	1.2	1.4	2.0	104.5	130.9	143.9	132.0
Belgium									15.0	30.0	30.0	38.1
Jugoslavia	6.4	15.1	20.7	24.5	6.4	15.1	20.7	24.5				
Norway	10.6	15.8	19.1	17.3								
Other countries†	4.9	7.5	11.3	11.7	10.6	17.9	20.9	30.6	14.3	91.6	87.6	91.1
Europe	134.9	141.9	173.1	173.0	187.1	141.2	164.5	184.3	644.2	808.4	758.9	715.8
United States	555.4	820.9	905.0	639.6	600.6	911.4	998.8	706.3	322.9	780.6	865.3	631.7
Mexico	52.8	65.5	86.6	73.4		45.9	57.9	53.1				
Canada	34.9	91.9	112.5	137.7		56.6	72.7	101.6				
Cuba	3.4	17.1	14.3	16.3								
Chile	42.3	289.9	316.0	222.0		277.4	303.2	208.0				
Peru	27.8	53.0	55.6	47.6								
Bolivia	0.9	8.5	7.2									
Argentina	0.1			5.0								
Other countries†	0.7				110.1	52.3†	54.4†	47.5†	15.9	22.0	27.5	24.5
America	718.3	1346.8	1497.2	1141.6	710.7	1343.6	1487.0	1116.5	338.8	802.6	892.8	656.2
Belgian Congo	7.5	112.5	137.0	138.9								
Rhodesia		5.5	6.5	7.9								
Other countries†	15.8	19.8	20.9	20.5								
Africa	23.3	137.8	164.4	167.3	10.4	126.3	150.1	150.8	3.0	3.5	3.5	3.0
Japan									24.5	79.9	70.4	69.0
Other countries†									17.2	7.5	8.0	8.0
Asia	66.7	83.9	93.7	101.2	66.5	71.6	81.8	87.5	41.7	87.4	78.4	77.0
Australia	47.2	9.6	13.0	13.2	43.8	12.0	11.0	15.1	14.0	8.0	8.0	5.8
World total	990.4	1720.0	1941.4	1596.3	1018.5	1694.7	1894.4	1554.2	1041.7	1709.9	1741.6	1457.8

* Austria-Hungary in 1913.

† Includes countries for which no specific information is given above.

‡ Chiefly Peru.

Source: Metallgesellschaft, Frankfurt a.M., *Statistische Zusammenstellungen über Aluminium . . .*, vol. xxxl (1930) 9-II, vol. xxxil (1932) 9-II.

what higher metal content, which must be smelted directly. The smelting of copper ores and pyrites has been steadily improved. Usually the ores are first subjected to a process which removes the chemically worthless constituents. In the past shaft furnaces were used exclusively to smelt the ores, but reverberatory furnaces have been substituted for them more and more during recent years. Working finely divided ores in the shaft furnace requires preliminary sintering, i.e. agglomeration, which involves considerable expense; and it is for this reason that the reverberatory furnace, in which finely divided ores can be smelted directly, has displaced the older apparatus, cutting in half the unit costs. But the reverberatory furnace is profitable only when it is very large; a single furnace requires about 100,000 tons of ore annually for efficient operation. Reverberatory furnaces are used chiefly in the American industry: at the close of 1931 there were in the United States 47 such furnaces with a total annual capacity of some 10,000,000 tons of ore; while only 19 shaft furnaces with a capacity of 3,000,000 tons were still in use, although there were 71 in 1919. In other countries shaft and reverberatory furnaces are about equal in number.

Since the 1890's refining by the electrolytic process has increasingly displaced refining by the use of high temperatures in furnaces. Electrolytic copper plants in the United States in 1929-31 had an annual capacity of some 1,600,000 tons; the Canadian plants can produce about 220,000 tons annually. Outside the United States there are electrolytic copper refineries in Chile, Germany, Russia, Belgium, Australia, Africa and Japan. Great Britain has no electrolytic refinery, although plans for the erection of such a plant were completed as early as 1928. In 1930 the world production of electrolytic copper was about five times that of furnace refined copper. It is not probable, however, that electrolytic refining will continue to gain over the older method. While furnace refined copper is less pure than the electrolytic metal, it is cheaper; and the cost of erecting furnace refineries is but a fraction of that of electrolytic plants. During the crisis years which set in after 1929 the output of furnace refined copper rose, while its competitor declined because of the demand for cheaper copper; this may prove to be a permanent trend.

The theoretical capacity of the world's copper refineries at the end of 1931 was over 3,000,000 tons, computed on the basis of the facilities for

refining raw copper as well as resmelted metal. This capacity has never been completely utilized. Smelter capacity is concentrated among comparatively few groups. In the United States the American Smelting and Refining Company directly controls a refining capacity of 590,000 tons in three great plants. The Anaconda concern has its own plant with a capacity of 162,000 tons; it controls the electrolytic refinery of the Raritan Copper Works and owns the two refineries in Chile of the Andes Copper Mining Company and the Chile Copper Company. The American Smelting and Refining Company is closely connected with the Braden Copper Company, which owns a refinery in Chile. Similar interlocking connections exist in the United States and other countries. British interests are now engaged in creating a copper trust with enormous refineries in Canada and Africa, the nuclei of which are the Amalgamated Metal Corporation and the Imperial Smelting Corporation. Sooner or later this trust will be extended by the establishment of new refineries in England itself. Japanese production capacity also is highly concentrated, under the domination of the Mitsui and Mitsubishi interests. In Germany there is less concentration, although there are four dominant concerns, one of which, the Metallgesellschaft, is allied with the Norddeutsche Affinerie, which in turn is closely linked to the British Amalgamated Metal Corporation.

Concentration in the smelting of copper is interlocked with concentrated ownership and control of available reserves of copper ore. Thirty-three companies control some 3,500,000,000 tons of the world's reserves of copper ore, or 73,000,000 tons of the metal on the basis of a 2.09 percent copper content. Ownership and control, however, are much more highly concentrated than would seem to be the case, for most of the copper mining companies are only nominally independent concerns and are dominated by the great smelting corporations. Probably ten groups control the major proportion of the world's available copper ore.

As in the case of iron, the growing use of copper has greatly increased the supply of scrap copper and of all sorts of copper waste. In the United States alone some 166,000 tons of copper were produced by resmelting in 1929, representing more than 15 percent of the refined copper output. In European countries, particularly in Germany with its wholly inadequate supply of copper ore, scrap copper, imported or

domestic, is an extremely important source of raw material for the copper smelters. Copper reclaimed from scrap and waste in the European industry may be estimated to average about 47 percent of the new copper consumed and some 31 percent of the copper smelted from the ore. The corresponding figures for the United States are relatively insignificant.

The consumption of raw copper has increased about 50 percent since 1913 (Table II). The distribution among the different industrial groups in the United States is approximately as follows: electrical products, 22 to 25 percent; telephones and telegraph, 10 to 12 percent; electric power and light transmission, 13 percent; copper wire for other than transmission purposes, 8 to 9 percent; automobile industry, 10 to 13 percent; building construction, 5 to 6 percent; copper castings for machine parts and utensils, 5 to 6 percent; miscellaneous, 8 to 10 percent. Copper used in the manufacture of radio sets amounted in 1931 to 1.5 percent of the raw copper. About 6 to 7 percent of the copper consumed by the United States was exported in manufactured goods. Although this distribution does not prevail in all countries because of differences in industrial development, on the whole it may be said that the electrical industry in its widest sense is the major consuming group as in the United States; second place is occupied by the brass industry; third by copper rolling mills and wrought copper works; fourth by shipyards, railways, foundries and general manufactures; and fifth by the chemical industry and copper sulphate manufacture.

The copper ore reserves and copper production of the world are divided into national, not continental, spheres of influence. Thus Canada's copper reserves do not belong to a general American "sphere of influence" but are included within the British sphere, just as are the areas and the production of Rhodesia or Australia. The American sphere of influence, however,

still includes the largest copper ore reserves, while the British occupies second place (Table III). Ore reserves of the British sphere represent mainly new workings, and large reserves may be discovered. This is unlikely in the United States, whose ore fields are thoroughly prospected and are gradually being exhausted. Important finds are unlikely also in South America. Since the Union Minière du Haut Katanga pursues a policy very similar to that of the British, it is safe to assume that from the standpoint of reserves the resources of the American and the Anglo-Belgian groups are almost equal. As for the other "neutrals," it is unlikely that the European deposits, outside of those in the Soviet Union, will yield any great output. Year by year the exploitation of these deposits is becoming increasingly difficult despite all technical advances.

The fact that copper is traded on a futures basis naturally affects the movement of prices, but it is not as determinant as certain groups of producers have apparently assumed. When Copper Exporters, Inc., was organized by the great producing interests to control prices it eliminated as much trading in copper as possible, direct dealings between producers and consumers being one of the major aims of the stabilization efforts of the international copper industry. The hostility of the great producing interests to the exchanges greatly reduced their turnover, but the effort to control prices was only partly successful. Before the founding of Copper Exporters, Inc., the difference in price between standard (raw) copper and electrolytic copper in the form of wire bars, cathodes and the like averaged from £6 to £7 per ton and was practically constant. But when Copper Exporters maintained prices unchanged at 18 cents per pound, or £84.10.0 per ton, from April, 1929, to May, 1930, despite the rapidly spreading depression, the price of standard copper in London dropped as much as £25 per ton below the price

TABLE III
DISTRIBUTION OF CONTROL OF THE WORLD'S COPPER RESERVES
(In thousands of tons of copper content)

BRITISH "SPHERE OF INFLUENCE"		AMERICAN "SPHERE OF INFLUENCE"		"NEUTRALS"	
COUNTRIES	AMOUNT	COUNTRIES	AMOUNT	COUNTRIES	AMOUNT
Canada	5,300	United States and		Belgian Congo	7,000
Rhodesia	19,800	Mexico	18,000	Russia	10,000
Australia	150	South America and		Europe (excluding	
India	50	Cuba	20,000	Russia)	4,000
Transvaal	50			Japan	4,000
Spain	2,000				
Total	27,350	Total	38,000	Total	25,000

Source: Compiled by the author.

on electrolytic copper. A break in the market may make its way under the cover of an artificially maintained cartel price until even the cover collapses.

Copper Exporters, Inc., has been dominated by the Anaconda Copper Company since its organization in 1926; it included also the Phelps Dodge Corporation, the American Smelting and Refining Company with its mining subsidiaries, Utah Copper and Braden Copper, as well as all the large copper exporting producers in the United States with the exception of the Miami Copper Company. The British Metal Corporation with its Canadian allies and the Union Minière du Haut Katanga likewise joined it. Formally speaking, the activity of Copper Exporters, Inc., applies solely to exports from the United States in accordance with the provisions of the Webb-Pomerene Act. Before its control of world prices broke down, there was no allocation of sales areas but quotas and prices were strictly maintained. The price policies of Copper Exporters, Inc., gave extraordinary impetus to the development of the African mines, a result not envisaged by the founders of the export association and which finally contributed to the collapse of its power. The opposition of European copper consumers to the price dictatorship of Copper Exporters, Inc., became so strong that no effort was spared to dispense with the cartel's supply by the opening up of new sources of copper. At its inception the cartel controlled some 90 percent of the world's copper production; this figure dropped to less than 70 percent by 1930, a development which was in part a result of the world crisis. Copper Exporters, Inc., collapsed in 1932 with the withdrawal of the Union Minière du Haut Katanga, and other foreign producers followed by the withdrawal in 1933 of the American Smelting and Refining Company.

Another consequence of the crisis was the revival of the old conflict between the mine smelters and the job smelters. The job smelters are primarily interested in making as full use of their capacity as possible, while the mine smelters are mainly concerned with keeping the price of copper as high as possible. By repeated threats to resign from Copper Exporters, Inc., the job smelters finally forced the mine smelters to consider business conditions, which were steadily becoming worse. Moreover they found ways to increase their sales at the expense of the mine smelters through more or less open evasion of the cartel regulations, and to influence the mar-

ket price to their advantage by supplying material exempt from cartel regulations. These conflicts contributed to the gradual disintegration of the cartel, accelerated by an increase in European smelter capacity, the output of which cut sharply into the cartel's sales.

With the imposition in 1932 of the virtually prohibitive United States tariff of 4 cents per pound the copper tariff problem reached a new stage. The mines in the southern states based their tariff demands, rejected for years but finally approved, on the fact that the country as a whole had in 1931 reversed its position from that of the largest copper exporter to an importer of copper; and they therefore claimed that a prohibitive tariff was necessary to keep their plants running. It is doubtful whether the change was merely a symptom of the crisis or was due to more basic causes. The president of the American Metal Company, which is engaged almost exclusively in job smelting, endeavored to prove that it was merely a crisis phenomenon and that a tariff was therefore unnecessary. The idea of a copper tariff spread rapidly in Great Britain, and only two months after the enforcement of the United States tariff the Canadian copper producers forced a decision in Ottawa to establish an "empire tariff" of twopence per pound on all materials containing copper. This tariff is intended to afford protection under which Rhodesian and Canadian copper output may reach the point where the British Empire will produce all the copper it requires. These developments have wiped out the former preeminence of American copper in the European industry. Moreover if the Soviet Union should, as is likely, enter the market with considerable quantities of copper during the next few years, the American position in the world's copper industry will be limited to its own domestic market. This shift in the balance of power would have taken place sooner or later, but there is no doubt that the activities of Copper Exporters, Inc., have hastened it by at least ten years.

Aluminum. Aluminum, the newest of the metals produced on a large scale, is obtained from bauxite ore. When Friedrich Wöhler first produced aluminum over one hundred years ago, the raw material he used was cryolite, a comparatively expensive substance, still employed as a flux in electrolysis. Today the metal is recovered solely from bauxite, although it is technically possible to obtain aluminum from other minerals. Bauxite contains from 55 to 65

percent of alumina (aluminum oxide); the other minerals of course have a much lower alumina content. As much as one quarter of the surface of the earth consists of minerals containing aluminum oxide, and there is practically not a single ore which does not include from 5 to 20 percent of aluminum oxide. Because of the cost, however, the production of aluminum from such minerals is impossible at the present time. Aluminum can be extracted profitably only from bauxite, which has an aluminum oxide content of about 52 percent. The known reserves of bauxite exploitable by present methods, estimated at 150,000,000 tons, are large enough to meet all requirements for an indefinite period; if it were possible to exploit materials containing 10 percent of silica, the reserves would total 1,500,000,000 tons.

Two principal processes are in general use for the production of aluminum from bauxite. In one process the ground bauxite is decomposed by heating with soda in giant rotary kilns, and the sodium aluminate formed is then dissolved, the iron oxide and the silica remaining as prac-

tically insoluble compounds. The other process involves decomposition of the bauxite with soda lye in autoclaves, again yielding a solution of sodium aluminate, while the iron oxide and the silica in the raw bauxite remain undissolved. The decomposed product is then thoroughly roasted, yielding an alumina which serves as the raw material for the production of metallic aluminum. This is effected by electrolytic decomposition of the alumina, the product being usually remelted in a special furnace and poured into bars. Another and much newer method is the electrothermic "Haglund" process, which is controlled by German aluminum interests and was first employed on a large scale in Italy.

Bauxite (Table IV) is not all consumed in the aluminum industry; some of it is used for other purposes, for example, in the cement industry. In 1927 only about half of the world's bauxite was used in the production of aluminum, the proportion rising to 60 percent in 1929 and over 80 percent in 1931. Bauxite is a relatively expensive raw material when put to other uses than aluminum production; the proportion con-

TABLE IV
PRODUCTION AND CONSUMPTION OF BAUXITE AND ALUMINUM, 1913-30
(In thousands of metric tons)

	BAUXITE PRODUCTION				ALUMINUM PRODUCTION				ALUMINUM CONSUMPTION			
	1913	1928	1929	1930	1913	1928	1929	1930	1913	1928	1929	1930
France	309.0	636.0	666.4	608.4	14.5	27.0	29.0	26.0	7.0	24.4	25.0	20.0
Germany	0.4	5.0	2.0		1.0	31.7	32.7	30.2	13.6	39.0	39.0	28.0
Italy	7.0	162.2	192.8	161.2	0.9	3.6	7.0	8.0	1.0	4.2	9.3	8.2
Jugoslavia		49.3	103.4	94.7								
Hungary	1.8	200.1	115.0	108.2								
Switzerland					10.0	19.9	20.7	20.5	4.0	6.0	8.0	7.0
Austria					3.0*	4.0	4.0	3.5				
Great Britain					7.6	10.7	13.9	14.0	5.0	17.0	30.0	24.0
Norway					1.5	22.8	24.4	24.7				
Spain						1.0	1.0	1.1				
Other countries†	6.2	11.4	12.4	19.1				0.2	4.0	13.0	14.0	16.0
Europe	324.4	1064.0	1092.0	991.6	38.5	120.7	132.7	128.2	34.6	103.6	125.3	103.2
United States	213.6	381.4	371.6	335.9	20.9	95.3	102.1	103.9				
Canada					5.9	40.0	42.0	34.9				
British Guiana		169.9	185.6	121.5								
Dutch Guiana		213.9	210.0	264.0								
America	213.6	765.2	767.2	721.4	26.8	135.3	144.1	138.8	31.2	124.0	137.0	95.0
India	1.3	14.9	9.2	2.5								
Asia	1.3	14.9	9.2	2.5					0.3	10.0	13.0	11.0
Australia										0.4	0.7	0.5
World total	539.3	1844.1	1868.4	1715.5	65.3	256.0	276.8	267.0	66.1	238.0	276.0	209.7

* Includes Austria-Hungary.

† Includes countries for which no specific information is given above.

Source: Metallgesellschaft, Frankfurt a.M., *Statistische Zusammenstellungen über Aluminium* . . . , vol. xxxi (1930) 3-5, vol. xxxiii (1932) 3-5.

sumed in the aluminum industry therefore rises when world business conditions are depressed and falls when they improve. The largest producers of bauxite are the French, from whom Great Britain imports practically all its requirements (scarcely any bauxite being imported from British Guiana).

Ownership and control of bauxite deposits are highly concentrated. The Aluminum Company of America (Mellon interests) owns deposits in the United States, the Guianas and other parts of the world. Recently the company bought the largest deposits in British Guiana and opened them to exploitation on a very large scale, constructing railroads and port facilities; it also owns the bauxite deposits in Dutch Guiana (the *Surinaamsche Bauxite Mj.* is a subsidiary of the Aluminum Company of America) as well as the bauxite fields in Istria and Dalmatia. Such European bauxite deposits as are not owned by the Mellon interests and the French are controlled, almost without exception, by the *Bauxitsyndikat A.-G.* of Zurich. This syndicate, organized in 1927, comprises the German, Swiss, Italian and British aluminum industries and includes also the owners of the Hungarian, Yugoslavian and Italian bauxite fields. Neither French nor American interests are represented. Thus the bauxite reserves of the world are divided among three major groups: the Americans, the French and the European *Bauxitsyndikat*.

The manufacture of aluminum is controlled by five corporate groups. The Aluminum Company of America has four plants in the United States; its Canadian subsidiary, Aluminum, Ltd., has two plants. In Germany the *Vereinigte Aluminiumwerke* operates two plants of its own and has majority stock control of the *Erft-Werk A.-G.*, which operates one plant. A smaller plant belongs to the *Metallgesellschaft* and the *I. G. Farbenindustrie*, producing only aluminum alloys. Another German plant is the property of the *Swiss Aluminium-Industrie A.-G.* of Neuhausen, which also operates two plants in Switzerland. In France the aluminum industry is dominated by the *Compagnie des Produits Chimiques et Électrométallurgiques Alais, Froges et Camargue*, with eight plants. Another French aluminum smelting firm is the *Société d'Électro-Chimie, d'Électrométallurgie et des Aciéries Électriques d'Ugine*, operating three plants. The Alais group and the Ugine group are closely connected. In Great Britain the *British Aluminium Company*, since its purchase of the

Aluminum Corporation, has completely dominated the industry. The Austrian and the Russian industry are of no importance in the world market.

The 276,800 tons of aluminum produced in 1929 was four times as high as the output in 1913 (Table IV), while in 1894 it was only 1240 tons. Improvements and lower prices resulting from the electrolytic process greatly accelerated the demand. The importance of aluminum increased tremendously during the World War, because it was found to be extremely useful for all sorts of military instruments. The German aluminum industry dates from the war.

Shortly after the World War efforts were made to combine the aluminum industry into a world cartel; but it was not until September, 1926, that a European aluminum cartel was formed, with Germany, France, Switzerland, Great Britain and Austria as members. This was a price fixing cartel with market allocations; it was expected that it would sooner or later come into conflict with the Aluminum Company of America, and there was much friction between the two, especially in colonial markets. The onset of the crisis in 1929 and after, however, so impaired market conditions that it forced an understanding. The American trust's erection of Canadian plants did not result in a conflict with the European cartel. Instead in 1931 the *Alliance Aluminium Company* was formed with its chief offices in Basel; the American trust played an important part in this merger of international interests. The *Alliance Company*, which controls nearly the entire world output and marketing of aluminum, is not a cartel but practically a world trust. This high degree of concentration is a result of the development of the aluminum industry during the age of advanced capitalism; its very beginnings bore the earmarks of capitalist monopoly. Aluminum production moreover requires large amounts of capital even for the erection of comparatively small producing plants. From the beginning aluminum production was based upon patent rights—in Germany governmental permission is a prerequisite to the establishment of a new plant—a fact which prevented wide distribution of producing plants, although the distribution of the raw material deposits would have made it possible.

Like its cartel predecessor the *Alliance Aluminium Company* pursues an aggressive price policy. Aluminum competes chiefly with copper and secondarily with tin and steel. The copper cartel, which was formed at about the same time

as the aluminum cartel, proceeded on the assumption that copper possesses a use monopoly in certain fields, upon which its price can be based. The leaders of the aluminum industry, on the other hand, assumed that aluminum must conquer its own market—mainly in competition with copper—and hence must be cheaper than copper. Copper cooking utensils have been almost completely displaced by aluminum in the United States and Germany; about 15 percent of the world's total aluminum consumption is devoted to cooking utensils. Aluminum is also coming into ever greater use in the construction of industrial apparatus, which absorbs some 14 percent of the total production; in breweries and distilleries, for example, giant tanks weighing as much as 18 tons are made of aluminum. Aluminum foil, accounting for about 15 percent of the supply, has almost wholly displaced the costly tinfoil in the packing of chocolate, cheese and cigarettes. Another important use of aluminum is in semifinished products, such as sheets, bars, wire and tubes, which use another 15 percent. Considerable aluminum is employed in the manufacture of alloys, such as silumin, which absorb from 10 to 12 percent of the average output. Some 10 percent is required in all sorts of engineering work, such as castings and cylinders in machinery, spools for the manufacture of artificial silk and similar products. The distribution of aluminum according to industrial uses varies of course with the industrial development of a country. In the United States, for example, the percentage of aluminum consumption by the automobile industry is considerably higher than in countries with smaller automobile production.

The great increase in the consumption of aluminum (Table IV) is merely an indication of the progress which may still be achieved. Aluminum is being increasingly utilized in new ways—for railway equipment, roofs and buildings, food containers, transmission, tank cars, pipe lines—for reasons of price or of quality.

Lead and Silver. These metals are historically closely interrelated; silver was obtained from lead ores at a comparatively early date. In general the lead ores containing silver are mined most intensively, because the silver content often pays for the mining of the lead ore. At the same time the increasing production of lead has greatly stimulated silver output. It is estimated that about 70 percent of the world's silver production comes from lead or lead-zinc ores, although lead and zinc are not so closely linked in

economic geography as are lead and silver. The largest producers of lead are also generally the largest producers of silver.

The output of silver has not shown any great changes in recent years (Table V). The price of silver affects decisively the purchasing power of many countries, particularly India and China. Silver prices depend largely upon the amount of silver produced, which in turn is not an independent factor but is dependent upon the amount of production of other metals, particularly lead. In other words, when the demand for lead is great, silver production is increased. Hence there is the paradoxical result that the purchasing power of a large proportion of the earth's inhabitants is affected considerably by the magnitude of lead mined. This link did not exist in the past, so long as silver was principally obtained as the major product of real silver ores, as in Mexico. Lead production rose 39.4 percent from 1801 to 1820, compared with the preceding decade, while the production of silver dropped 39.5 percent. From 1821 to 1830 lead production rose no less than 168.2 percent, while silver production fell 11.4 percent. The two metals moved independently. The change began when improved technique succeeded in exploiting the silver of ores with a low silver content or in which the silver was hard to separate from the other metals. Coinage is still the major use to which silver is put, followed by jewelry and other luxury articles. It is estimated that during the past decade industry has used from 30,000,000 to 45,000,000 ounces of silver annually.

The Americas are the center of the world's lead production, with Asia (Burma) steadily increasing its output since the war. The opening of new mines in north Africa, whose lead reserves have been only slightly developed, may effect a marked change in the situation. There is considerable decentralization in lead production, and smelting is being centered closer to the ore producing fields. Australian experience indicates that this tendency has been accentuated since the World War. Before the war a large proportion of the Australian lead mines were owned and worked by German concerns, which did not propose to have the ores smelted at the mine by Australian concerns which they might not be able to control; in addition the Germans wanted to insure a supply of ore for domestic smelters under their control. Australian concerns now do most of the smelting. It is noteworthy that European smelter production of

TABLE V
WORLD PRODUCTION OF SILVER, 1913-30
(In thousands of fine ounces)

	1913	1928	1929	1930
Germany	4,984.6	5,220.8	5,512.8	5,485.4
Spain*	4,437.6	2,526.5	2,659.2	2,659.2
Austria†	2,104.1	18.9	10.6	10.2
Greece	803.7	241.1	241.1	241.1
France	520.7	360.1	360.1	652.0
Italy	423.8	514.4	518.7	571.6
Norway	247.9	398.7	322.3	337.8
Russia		380.0	300.0	300.0
Great Britain	128.5	32.8	36.0	40.9
Czechoslovakia		767.7	723.0	890.5
Other countries‡	1,596.8	472.8	606.3	876.0
Europe	15,247.7	10,933.8	11,290.1	12,064.7
Japan	4,649.9	5,144.9	5,144.9	5,628.5
Burma		7,400.0	7,273.3	7,072.1
Dutch East Indies	465.9	2,032.0	1,967.9	2,094.2
Other countries‡	66.8	503.2	466.2	467.4
Asia	5,182.6	15,080.1	14,852.3	15,262.2
Union of South Africa	933.1	1,031.4	1,031.8	1,050.0
Other countries‡	122.9	234.0	280.8	255.4
Africa	1,056.0	1,265.4	1,312.6	1,305.4
Mexico	70,703.8	108,537.3	108,700.4	105,410.9
United States	66,801.5	58,426.0	61,233.3	50,627.2
Canada	31,524.7	21,936.4	23,143.3	26,435.9
Peru	9,971.0	21,607.7	21,495.2	15,500.3
Bolivia	3,932.5	5,638.8	4,816.2	7,091.1
Chile**		1,436.7	1,436.7	732.4
Other countries‡	2,860.7	2,758.6	3,000.0	4,112.8
America	185,794.2	220,341.4	223,825.1	209,910.6
Australia	18,128.5	10,304.4	10,434.0	10,164.9
World total	225,409.0	257,925.4	261,714.1	248,707.8

* 1913 total includes Portugal.

† Austria-Hungary in 1913.

‡ Includes countries for which no specific information is given above.

** 1913 output included in Bolivia.

Source: Compiled from the *Annual Reports* of the Director of the United States Mint.

lead has declined considerably since 1913 (Table VI). In 1931 there were 107 lead smelters in the world; while there are a considerable number of small producers in Europe, Africa, Asia and South America, lead production is dominated by about a dozen concerns, which operate on an international scale.

Since 1913 the greatest advances in lead consumption have been in the United States and Japan. Nearly 30 percent of the metal is used in the manufacture of electric batteries and storage batteries. Lead is indirectly of considerable importance in power transmission, since 20 percent of the total output is required in the manufacture of cable sheaths. Lead is thus an important structural material for the electrical industry. In the automobile industry, which absorbs only 1 percent of the total output, lead

is little used. Building construction accounts for some 8 percent, while smaller percentages are distributed among munitions, lead foil, type metal, solders, bearing metals and similar manufactures. An important consumer of lead is the paint industry, which demands from 16 to 18 percent of the total. The world's lead markets are split up by numerous tariff walls, and many countries impose prohibitive tariffs.

Zinc. The industrial production of metallic zinc dates from the beginning of the eighteenth century. As a rule the mined ore cannot be smelted at once because of its low zinc content; it must first be freed of the barren rock, which is done mainly by means of flotation, preceded by a mechanical separation according to weight. The flotation process has grown considerably since the war and has rendered valuable service

TABLE VI
PRODUCTION AND CONSUMPTION OF LEAD, 1913-30
(In thousands of metric tons)

	MINE PRODUCTION				SMELTER PRODUCTION				CONSUMPTION, CRUDE			
	1913	1928	1929	1930	1913	1928	1929	1930	1913	1928	1929	1930
Spain	178.8	113.3	116.5	109.5	213.0	123.1	133.6	121.5	10.0	24.0	25.0	25.0
Germany	80.3	48.7	52.7	61.0	172.7	87.0	97.9	110.8	215.1	216.5	212.3	165.2
Italy	26.8	31.7	30.5	29.9	21.7	21.3	22.7	24.3	32.6	48.3	47.3	42.2
Austria*	20.6	6.0	7.5	8.9	24.1	8.1	6.6	6.9	35.5	16.7	15.1	10.7
Great Britain	18.4	15.1	18.9	20.6	30.4	8.6	10.8	10.4	191.3	245.0	274.2	250.0
Greece	18.4	7.3	5.4	7.3	18.4	7.3	5.4	7.3				
France	10.2	7.5	11.2	11.0	28.8	22.7	20.8	19.4	108.4	113.7	112.5	145.0
European Russia	3.3	1.0	1.8	1.6					58.8	52.0	50.0	58.0
Sweden	1.7	3.3	7.0	5.9								
Czechoslovakia and Jugoslavia		16.0	15.5	24.8		13.2	13.9	14.2				
Belgium					50.8	53.6	53.5	58.9	37.8	51.1	55.0	48.0
Holland									9.5	18.0	20.7	22.5
Switzerland									5.8	9.5	11.3	12.6
Other countries† Europe	0.9	14.9	14.9	14.2	2.2	30.0	28.3	31.9	6.3	58.0	59.6	63.1
	359.4	264.8	281.9	294.7	562.1	374.9	393.5	405.6	711.1	852.8	883.0	842.3
United States	453.8	568.9	587.8	507.1	407.9	607.2	649.2	557.3	401.4	636.0	657.5	521.5
Mexico	62.0	236.5	248.5	232.9	55.5	215.5	229.8	231.2				
Canada	17.1	153.3	148.1	151.0	17.2	146.5	140.9	139.1	22.3	30.8	37.8	30.0
Other countries† America	3.0	36.0	53.2	47.0	2.5	22.0	28.2	22.8	10.2	32.0	28.0	25.0
	535.9	994.7	1037.6	938.0	483.1	991.2	1048.1	950.4	433.9	698.8	723.3	576.5
Asiatic Turkey	14.0	7.1	6.6	7.0	13.9	7.1	6.6	5.6				
India (Burma)	10.0	83.1	84.9	85.7	6.5	79.6	81.5	80.8				
Japan	3.8	3.7	3.4	3.6	3.8	3.7	3.4	3.4	18.7	65.8	64.0	59.4
Other countries† Asia	1.5	12.5	13.5	13.0		1.8	5.0	7.0	6.7	21.7	13.9	18.2
	29.3	106.4	108.4	109.3	24.2	92.2	96.5	96.8	25.4	87.5	77.9	77.6
Algeria	10.3	12.9	8.6	7.2								
Tunis	23.0	18.7	17.0	15.0		17.6	18.9	19.1				
Rhodesia	0.5	4.8	1.7			4.8	1.7					
Other countries† Africa	16.0	23.7	23.4	22.8	0.6	5.0	3.3	2.8				
	49.8	60.1	50.7	45.0	0.6	27.4	23.9	21.9	6.2	3.5	4.6	4.5
Australia	254.8	172.8	187.0	194.1	115.6	157.6	179.7	171.0	9.6	12.0	15.0	12.0
World total	1229.2	1598.8	1665.6	1581.1	1185.6	1643.3	1741.7	1645.7	1186.2	1654.6	1703.8	1512.9

* Austria-Hungary in 1913.

† Includes countries for which no specific information is given above.

Source: Metallgesellschaft, Frankfurt a.M., *Statistische Zusammenstellungen über Aluminium . . .*, vol. xxxi (1930) 6-8, vol. xxxiii (1932) 6-8.

where the zinc ores are scattered in fine particles throughout the barren rock or are closely interlaced with other minerals. Without this process the exploitation of very extensive zinc ore deposits would be practically impossible or extremely costly. The various processes are often combined in large plants located in zinc ore fields. These centralized plants do not always include production of the metal, but merely of concentrates, which are shipped to distant smelters. There existed everywhere before the war numerous job smelters without ore resources of their own. The present trend, however, is toward the elimination of job smelters, with the

result that the zinc ore offered for sale in the open market is constantly diminishing.

In 1913 the world's zinc supply was centered in Germany and Belgium. Part of the German zinc industry depended upon the zinc ore deposits of Upper Silesia, while the Belgian and west German zinc smelters imported most of the necessary ore from other countries, chiefly Australia and the United States; the zinc was then reexported as metallic zinc or in manufactured form to supply the requirements of the countries which had ore deposits but no adequate zinc smelting industry. In recent years the production of zinc has shifted largely to the coun-

tries possessing large zinc deposits, instead of being concentrated in central Europe.

The United States is the world's greatest producer of zinc (Table VII); its export of zinc concentrates, which was important before the war, has practically ceased, largely because smelter capacity has increased tremendously, so that the American smelters work at only two-thirds capacity even in boom times. Second in importance as a zinc mining country is Australia; before the war about 75 percent of the ore was shipped to Belgium, Germany, France and Holland, but the exports have since declined considerably.

Only a small part of Mexico's large zinc output is smelted in the country. There is a trend among the large American concerns toward the erection of extensive smelting plants in Mexico, whose export of zinc concentrates is still of importance for the Belgian and German smelters, although this condition may cease suddenly. Poland ranks fourth among the zinc mining countries of the world. In Germany the zinc mines cannot fill the capacity requirements of the smelters.

There has been a twofold shift in zinc smelter production since the World War (Table VII). American production, which constituted only

TABLE VII
PRODUCTION AND CONSUMPTION OF ZINC, 1913-30
(In thousands of metric tons)

	MINE PRODUCTION				SMELTER PRODUCTION				CONSUMPTION, CRUDE			
	1913	1928	1929	1930	1913	1928	1929	1930	1913	1928	1929	1930
Germany	250.3	137.4	147.4	154.3	281.1	98.1	102.0	97.3	232.0	204.3	198.0	171.0
Belgium		6.0	5.0	4.0	204.2	206.3	197.9	176.2	82.6	114.9	123.5	118.0
Spain	66.5	43.0	53.0	50.0	6.9	13.5	11.8	10.7	6.0	9.5	9.2	9.0
Italy	63.3	84.8	87.0	79.6		10.6	15.7	19.0	10.8	21.1	22.8	23.2
European Russia	31.4	2.0	2.2	2.5		2.4	2.2	2.5	33.3	33.0	37.0	42.0
Sweden	17.2	14.2	29.9	30.0	2.1	5.1	4.7	4.1	11.0	9.4	11.9	12.0
Norway					9.3		5.5	34.6				
France	13.0	9.5	9.6	7.4	64.1	96.8	91.6	90.7	81.0	125.3	116.3	127.0
Greece	10.5	4.5	5.9	3.7								
Great Britain	5.9	0.7	0.9	0.7	59.1	56.3	59.2	49.4	194.6	184.0	190.2	155.0
Poland		100.0	105.0	100.0	7.6	161.8	169.0	174.7	40.3	7.1	7.8	7.5
Austria*					21.7							
Holland					24.3	26.9	25.7	23.3	4.0	5.5	8.5	9.0
Czechoslovakia and Yugoslavia						15.5	19.5	21.1				
Other countries† Europe	4.1	3.5	4.0	12.5					1.0	71.4	76.0	65.8
	462.2	405.6	449.9	444.7	680.4	693.3	704.8	703.6	696.6	785.5	801.2	739.5
United States	368.7	630.6	657.2	540.2	314.5	546.7	567.4	451.8	279.6	518.7	528.1	386.0
Mexico	6.8	161.7	174.0	124.1		11.2	15.1	29.4				
Canada	4.5	83.8	89.5	121.4		74.2	78.1	110.2				
Other countries† America	2.1	12.3	38.0	39.0					3.5	31.7	37.3	27.9
	382.1	888.4	958.7	824.7	314.5	632.1	660.6	591.4	283.1	550.4	565.4	413.9
Japan	15.8	10.0	10.0	10.0					7.4	54.9	46.7	45.2
China	3.9	4.0	11.0	3.8								
Indo-China	14.0	21.5	18.8	15.9								
Other countries† Asia	2.3	42.0	46.2	46.5					8.9	8.5	8.3	9.6
	36.0	77.5	86.0	76.2	1.5	22.0	26.9	28.8	16.3	63.4	55.0	54.2
Algeria	36.9	15.0	13.8	8.0								
Tunis	1.9	5.0	3.8	0.9								
Rhodesia		13.6	22.5	19.3								
Other countries† Africa		1.7	2.4	0.7								
	38.8	35.3	42.5	28.9		9.7	12.3	18.2	0.6	2.0	2.0	2.0
Australia	219.7	150.2	157.0	121.5	4.4	51.0	52.7	55.8	4.4	15.4	15.0	13.0
World total	1138.8	1557.0	1694.1	1496.0	1000.8	1408.1	1457.3	1397.8	1001.0	1416.7	1438.6	1223.2

* Austria-Hungary in 1913.

† Includes countries for which no specific information is given above.

Source: Metallgesellschaft, Frankfurt a.M., *Statistische Zusammenstellungen über Aluminium . . .*, vol. xxxi (1930) 14-16, vol. xxxiii (1932) 14-16.

31 percent of the world total, reached 45.5 percent by 1929, while Europe's output dropped from 68 to 48.5 percent. Another important change is the growing proportion of electrolytic zinc. Before the war the percentage was so small as to be statistically negligible, while in 1931 electrolytic zinc accounted for some 33 percent of the total world output.

Zinc production is more highly concentrated than lead production. In the United States by far the major part of the output is practically controlled by three companies—the Anaconda Copper Mining Company, the American Smelting and Refining Company and the American Metal Company. The United States Steel Corporation also operates zinc smelters with an aggregate output of about half that of the Anaconda Company. Canadian zinc smelting is dominated by the Consolidated Mining and Smelting Company of Canada and the Hudson Bay Mining Company, while in Europe the chief producers are the Vieille Montagne group, which has smelters in Belgium, Germany and France, and the Upper Silesian Giesche group, in which Anaconda has an interest. Other dominant concerns are the British National Smelting Company, Ltd., and Imperial Smelting Corporation, Ltd., and the Electrolytic Zinc Company of Australia.

The zinc smelting industry is closely bound up with the manufacture of sulphuric acid. It is generally estimated that the smelting process extracts half a ton of zinc and one ton of sulphuric acid from one ton of crude concentrate. The opportunities for marketing sulphuric acid largely determine the profitability of zinc smelters. Of a total sulphuric acid production of 6,500,000 tons of sulphuric acid (60° Baumé) in the United States in 1929 some 1,300,000 tons were obtained from copper and zinc ores and about 295,000 tons out of a total output of 336,000 tons in Poland, while 188,000 tons were obtained from zinc blende in Germany in 1929. The Belgian zinc smelters dispose of their sulphuric acid jointly with the French chemical industry. In recent years therefore zinc smelters have been endeavoring to locate in regions where a fairly stable sulphuric acid demand exists.

The United States has made the largest gains in the consumption of crude zinc (Table VII). It is estimated that about 46 percent of the total American amount is used in the galvanizing of sheets, pipes, wire and the like, while some 29 percent is absorbed by brass production. About 11 percent goes to rolling mills, chiefly for the

manufacture of zinc sheeting for roofing, and some 6 percent to art casting; while the remainder is used in the manufacture of zinc paints and of zinc dust, which is widely employed as a reducing agent. Zinc compounds are extensively used in the chemical industry.

Tin. The world's production of tin is concentrated in Asia, chiefly in the Federated Malay States, the Dutch East Indies, China and Siam. In Bolivia production is growing to considerable proportions, while in Africa and Australia it is proceeding on a much smaller scale.

There are geologically two major groups of tin deposits, a classification which is also important economically. Because of its high specific gravity and its resistance to atmospheric effects, tinstone (cassiterite), the principal tin ore, is found in the form of "stream tin" as well as in the primary form of "mine tin." Stream tin comprises the largest deposits at present, thus being more important than the usually much poorer primary deposits. The mining of stream tin usually consists in flooding the area, the tin bearing sludge produced being pumped out by special dredgers, then dried and concentrated. This process is considerably cheaper than the mining of primary ore veins and constitutes the main cause of the rapid growth of tin mining in the Malay States, the Dutch East Indies and Siam; the Bolivian, Chinese and Nigerian mines use the more costly regular mining methods.

In the Malay States tin mining is in the hands of a large number of concerns, whose annual production ranges from a few tons to several thousand tons. Severe competition is offered the large mechanized plants by the small Chinese entrepreneurs, who operate much more cheaply, working by quite primitive methods and sometimes employing only a few coolies. The small Chinese plants control a considerable tin output and were exerting great influence in the market until legislation compelled them to comply with certain production limits. The far reaching decentralization of Malayan tin mining contrasts with the extremely centralized mining in the Dutch East Indies and Bolivia. The industry is dominated by two major groups in each area—the Banka and Billiton groups in the Dutch East Indies and the Patiño and Aramayo groups in Bolivia.

The United States is the largest consumer of tin, absorbing some 50 percent of the world output, compared with 15 percent consumed by England and 10 percent by Germany. Yet tin is one of the very few raw materials not found in

the United States in profitable quantities. Thus the United States is merely a tin buyer not a tin producer, although it is simultaneously a large scale producer and consumer of all other metals. This together with the fact that London has been for decades the center of the world's tin trade has a profound influence on the tin market. The interests of the United States are wholly on the side of low prices with regard to tin, whereas in the case of other metals there are powerful opposing interests because of the large production of the United States. In this respect the tin industry strongly resembles the rubber industry. There are two large tin smelters in the United States erected during the World

War, but since they have been unable to secure ore they have been shut down since shortly after the war. The centers of the tin smelting industry are in England and the Straits Settlements. Of the total world smelter capacity of 272,000 tons some 190,000 tons, or about 70 percent, is controlled directly by the British, but the percentage becomes still higher if the 20,000 tons of wholly unused American smelter capacity is disregarded; Germany has a capacity of 12,000 tons, Holland of 5000 tons, Belgium of 1800 tons and France of 1000 tons. The output of tin under British control rose from approximately 50 percent in 1913 to 84 percent in 1929 (Table VIII).

TABLE VIII
PRODUCTION AND CONSUMPTION OF TIN, 1913-30
(In thousands of metric tons)

	MINE PRODUCTION				SMELTER PRODUCTION				CONSUMPTION, CRUDE			
	1913	1928	1929	1930	1913	1928	1929	1930	1913	1928	1929	1930
Great Britain					22.7	50.0	58.0	49.0	25.1	29.3	25.2	19.7
Germany					12.0	7.0	4.0	5.0	19.9	14.6	16.4	14.6
France									8.3	11.0	12.1	11.9
Austria*									3.1	1.3	1.1	0.9
Italy									2.9	4.0	5.0	4.4
Russia									2.7	5.0	4.5	5.0
Belgium									2.3	1.3	1.4	1.5
Scandinavia									1.6	1.8	2.3	2.5
Switzerland									1.4	2.0	2.2	2.3
Spain									1.3	1.6	1.8	1.9
Holland									0.3	1.0	1.4	1.4
Other countries†					0.5	1.6	2.0	3.2	1.2	5.0	5.5	5.1
Europe	5.4	3.6	4.1	3.4	35.2	58.6	64.0	57.2	70.1	77.9	78.9	71.2
United States									45.0	76.7	86.1	75.0
Bolivia	26.8	42.1	47.1	38.8	0.3							
Other countries†	0.4	0.2	0.2	0.4					3.4	5.8	6.2	5.1
America	27.2	42.3	47.3	39.2	0.3				48.4	82.5	92.3	80.1
Malay States	52.7	65.5	70.5	65.0								
Straits Settlements						96.3	107.1	97.0				
Dutch East Indies	21.2	35.5	36.3	34.9	86.1	14.5	13.6	15.1				
China	8.5	6.9	6.9	6.6	6.1	6.9	6.9	6.6	5.4	3.9	3.3	3.2
Siam	6.7	7.7	10.1	11.7								
Japan						0.5	0.6	0.7				
Indo-China						0.3	0.3	0.3				
Other countries†	0.7	3.8	4.3	5.1					3.3	7.6	7.6	6.9
Asia	89.8	119.4	128.1	123.3	92.2	118.5	128.5	119.7	8.7	11.5	10.9	10.1
Africa	5.4	11.9	13.3	10.6					0.5	1.5	1.7	1.7
Australia	7.9	3.2	2.3	1.6	4.8	3.2	2.3	1.6	1.4	1.9	1.7	1.4
World total	135.7	180.4	195.1	178.1	132.5	180.3	194.8	178.5	129.1	175.3	185.5	164.5

* Austria-Hungary in 1913.

† Includes countries for which no specific information is given above.

Source: Metallgesellschaft, Frankfurt a.M., *Statistische Zusammenstellungen über Aluminium* . . . , vol. *xxx* (1930) 17-18, vol. *xxiii* (1932) 17-18.

Corporate control of the tin industry is highly concentrated. In 1929 the British smelters merged into a trust, the Consolidated Tin Smelters, Ltd., which controls also the Eastern Smelting Company and other concerns in the Far East; the combination has an annual smelting capacity of 120,000 tons and is affiliated with the Patiño interests, which have no smelter of their own in Bolivia but produce some 20,000 tons of tin annually (33,000 tons in 1929). This is the dominant group. The other Bolivian concern, the Compagnie Aramayo de Mines en Bolivie, is controlled by the Guggenheim interests; this is the only case of a major American influence in the tin industry.

Tin is fairly easy to replace. About one third of the tin output is consumed in the manufacture of tin plate, which is also the most important source of resmelted tin. Tin is important as an essential constituent of bearing metals, and it is used in considerable amounts in the chemical industry.

Nickel. For a long time nickel was not recognized as an independent metal. It was produced in an independent but impure metallic form for the first time in 1751; pure nickel was produced in 1804. For many years nickel was used mainly in the production of German silver, a copper-nickel-zinc alloy, and for coinage. The demand for the metal rose enormously when it began to be used in the galvanizing of iron articles and particularly after 1889 in electroplating and the manufacture of high grade steel. The raw materials for nickel production formerly came from Germany, Austria and New Caledonia; at present, however, about 90 percent of the total world production of nickel comes from the Canadian ore fields (Table ix). There are other deposits, especially in Russia, but they are still comparatively unimportant.

The geographical concentration of nickel ore deposits is reflected in a corresponding concentration of corporate control. In 1928 the Canadian and British groups merged to form the International Nickel Company of Canada, which at present completely dominates the world market. International Nickel easily induced the comparatively small independent groups (the French Société de Nickel, which exploits deposits in New Caledonia, and the Falconbridge Nickel Mines, Ltd., of Canada, which is also interested in the exploitation of the old Norwegian deposits in Kristiansand) to comply with a price policy without precedent in other metal markets. The price of nickel has been practically

TABLE IX

MINE PRODUCTION OF NICKEL, 1913-30
(In thousands of metric tons of nickel content)

	1913	1928	1929	1930
Germany	0.8	—	—	—
Norway	0.7	0.5	0.4	0.9
Greece	—	0.6	0.6	0.5
Other countries	—	0.4	0.5	0.8
Europe	1.5	1.5	1.5	2.2
Asia (Burma)	—	0.7	0.8	1.0
Canada	22.5	45.5	58.5	55.4
United States	0.2	0.5	0.3	0.3
America	22.7	46.0	58.8	55.7
Australia	6.7	4.6	5.4	5.5
World total	30.9	52.8	66.5	64.4

Source: Metallgesellschaft, Frankfurt a.M., *Statistische Zusammenstellungen über Aluminium* . . . , vol. xxxi (1930) 12, vol. xxxiii (1932) 12.

unchanged since 1925; it was not raised during the metal boom of 1925-29 nor was it reduced during the crisis. The extent of concentration is evidenced by the fact that the two electrolytic plants of the International Nickel Company of Canada have a combined annual capacity of 90,000 tons, greatly exceeding the amount of ore mined and the world's present needs.

Nickel is consumed mainly in the form of alloys. In 1926 ferronickel and nickel steel accounted for 37 percent of the world's nickel consumption; cupronickel and German silver alloys, 37 percent; other alloys and nickel castings, 16 percent; and nickel plating and the chemical industry, 10 percent.

Alloys. Although alloys (e.g. bronze) have been used for many centuries, recent technical improvements have greatly augmented their number; there are now thousands of alloys, which are important chiefly because they improve upon the basic metal either generally or for some specific purpose. Alloying may harden a metal, increase its ductility, raise its resistance to external influences and produce other desirable changes. The multitude of alloys may be divided into three great groups: iron and steel alloys, copper alloys and aluminum alloys.

The principal iron alloy, from the standpoint of quantity, is ferromanganese. Manganese is usually added to steel to increase its hardness. The principal deposits of manganese ore are in Russia, British India, the Gold Coast, South Africa, Brazil, Cuba, Tunis and Morocco; most countries, however, have some manganese deposits or iron ore deposits containing manganese, although the major steel producers must depend

upon imports. About 80 percent of the world supply comes from Russia, the Gold Coast, Brazil and British India. Manganese is employed extensively in copper and aluminum alloys, in the chemical, paint and pharmaceutical industries and in the manufacture of dry batteries. But its most important use is in iron and steel alloys, the composition of which varies widely because variations in the amount of manganese added to steel result in extraordinary changes in its properties. Manganese steels, while extremely hard, are not brittle and are used in the manufacture of products requiring high tensile, compressive and resistant strength. They are indispensable in the manufacture of gearing, power transmission chains, rollers and roller axles, railway bolts, ore and grain mill parts and so on. Among other important steel alloys are ferrosilicon, ferrochrome, ferrotungsten, ferronickel, ferrovanadium, chrome nickel and stainless steel, which is an alloy of iron, chromium and nickel. In the United States in recent years alloy steels have comprised from 5 to 7 percent of the steel output.

The principal copper alloy is brass. Cast brass contains from 55 to 67 percent copper and about 3 percent lead; the remainder is zinc. Special brasses sometimes have small quantities of manganese, aluminum, iron and tin, the aggregate percentage rising as high as 7.5 percent. Brass is used in the manufacture of a variety of consumers' goods, as well as for ship propellers, small bearings, portholes and castings of high tensile strength. There are various forms of rolled and hammered brass. Hard brass (screw brass), with 58 percent copper, 2 percent lead and 40 percent zinc, is used for bar stock for screws, in electrical engineering and in the manufacture of instruments, window frames and other construction parts. Wrought brass, containing 60 percent copper and 40 percent zinc, is employed for bars, wire, sheets and pipes and many other purposes, especially in shipbuilding; while brass containing 63 percent copper and 37 percent zinc is used in the form of sheets, strips, wire and bars in the manufacture of metal goods and instruments. There are many other brasses of importance in manufactures. Nearly every country has a brass industry. In 1929 Germany produced approximately 120,000 tons and the United States 220,000 tons. Scrap brass is remelted on a large scale.

Another important group of copper alloys includes the red brasses and bronzes. These are mainly alloys of copper, zinc and other con-

stituents. Bronze is used extensively in machinery, shipbuilding, locomotives and freight cars and in building construction.

There are hundreds of alloys of aluminum, which is alloyed with other metals either to increase its hardness, tensile strength and ductility or to produce very light metals; in the form of duraluminum it is being increasingly used in airplane and similar manufactures, in building construction and for other purposes. The light metal industry, which is becoming increasingly important, is still in its infancy but it is being actively promoted by aluminum concerns. Both aluminum and aluminum alloys have the advantage of light weight; a new American type of railway car built of duraluminum weighs nearly one half less than if built of ordinary structural steel.

The properties of magnesium, which is used to form the most important of the aluminum alloys, are still in dispute; it has been known since 1809, but the technical difficulties involved in the mass production of magnesium were solved only shortly before the World War and mainly in Germany. Before the war the United States secured it from Germany, but it has since depended upon its own magnesium production, accompanied by intensive technological development. There are no accurate statistics on the production and consumption of magnesium. The world output is estimated at about 6000 tons, about half of which is produced in Germany by the I. G. Farbenindustrie, which has an agreement with the American Magnesium Corporation. Since there is an abundance of raw material available in the form of magnesium chloride, it is generally believed that magnesium may soon become a serious competitor of aluminum. But the bonds between the two industries are so close already that there is little likelihood of a struggle for supremacy between the two metals; magnesium production is practically under the control of the Aluminum Company of America in the United States and of the I. G. Farbenindustrie in Germany. About 60 percent of magnesium is used in the form of alloys and 15 percent in the form of powder; the chemical industry absorbs considerable quantities.

Other Metals. Gold and platinum are the most important of the other metals. The importance of gold lies in its monetary uses (*see* GOLD). The industrial uses of gold, however, are also important, although no more so than those of silver. The most important property of gold is its extraordinary resistance to all sorts of destruc-

tive influences. Whereas iron has an average durability of some twenty-five years and that of other metals is considerably shorter, the life of gold is practically unlimited. The industrial use of gold is estimated by the gold committee of the League of Nations in its 1931 report at about 45 percent of the total consumption. It is used mainly for jewelry and other luxury articles, in the chemical industry and in dentistry. Approximately one third of the gold used in industry is derived from the resmelting of old gold. The gold used in the manufacture of gold leaf and in gilding and gold plating is, however, lost forever.

Compared with gold, platinum and the metals in the platinum group are of relatively slight importance as "precious metals." The properties of platinum were known as early as the eighteenth century, but the metal was not produced industrially until the nineteenth. All platinum came from Colombia until 1819, when extensive deposits were discovered in the Urals in Russia, which became the largest producer of platinum, producing 7775 kilograms in 1913 out of a world output of some 8500 kilograms. Russian production became negligible during the World War and as a result of the revolution; an extreme shortage prevailed until 1927, and platinum prices rose considerably. As a consequence Colombian production revived, yielding over 1600 kilograms in 1928, when Russian production increased very rapidly, mounting to over 4000 kilograms in 1931. The Russians, whose platinum deposits were exploited mainly by British and French groups before the war, have since modernized their platinum production and are again the most important factor in the industry, having almost completely overwhelmed Colombian competition. Soviet Russia has also offered severe competition to South Africa, which started production only after the war. The Canadian output, however, challenges that of Russia, since it is not obtained from platinum ores but is a relatively cheap by-product of the smelting of nickel-copper ores. The strength of this competition led the Russians to reach an agreement with the British-Canadian-South African interests after years of bitter struggle for the domination of the world market. The agreement resulted in the establishment of Consolidated Platinums, Ltd., with its main offices in London. It is the function of this company, which is usually called the "international platinum convention," to regulate the sale of platinum; but it has been unable to stop the price

drop of five sixths which has occurred since the crisis. The largest consumer of platinum is the United States. The jewelry industry uses approximately 45 percent of the output of platinum, dentistry 20 percent, electrical manufacturing 18 percent, the chemical industry 15 percent and miscellaneous industries 2 percent. Platinum compounds and platinum sponge are of great importance as catalyzers in the chemical industry.

The other metals of the platinum group—osmium, iridium, palladium, rhodium, ruthenium and osmiridium—are of slight importance in world economy. Iridium is employed in the manufacture of fountain pen points. Palladium is often used as a substitute for platinum in the jewelry industry because of its lower cost.

The remaining metals are close to the border line between metallic and chemical raw materials. The German tariff, for example, classifies mercury as a chemical raw material. Mercury has been mined since early times; the Phoenicians produced it in the Spanish mines at Almadén, which are still the largest in Spain. The production of mercury rose sharply when increasing quantities were employed in the production of silver after the discovery of the New World. The chief producing countries before the World War were Austria, Spain, Italy and the United States. Austria is no longer an important producer, as its production areas were annexed by Italy. At the present time Italy is the world's largest producer, although Spain could have a larger output if production were not voluntarily restricted by the Spanish-Italian cartel, which has profoundly changed the world market in mercury. Prior to the war sales in Austria were made through a government monopoly, which owned the present Italian mines in Idria. The Italian Monte Amiata group sold its own output, while for many decades the Spanish Almadén group was financially linked with the Paris Rothschilds, who were in charge of its sales. There were thus three major factors in the world market. After the World War Italian and Austrian production were merged, and in 1927 the Italian producers formed a cartel with the Spanish interests, the *Mercurio Europeo*. This arrangement, which expires in 1934, at first dominated the world market almost exclusively. It controlled about 85 percent of the world's output; even American consumption depended upon it until very recently, and the cartel took advantage of the monopoly to maintain mercury prices at an extremely high level.

This price policy, which for many years made mercury relatively the most expensive raw material in the world, resulted in stimulating production wherever production was possible. The United States, which produced only 305 tons in 1926, increased its output to 1104 tons in 1931. In 1926 American production was only 9 percent of the European output, but by 1931 it amounted to more than half. This development together with the restriction of the industrial use of mercury by the Mercurio's price policy and the decline in prices caused by the world crisis brought about the disintegration of the cartel. It will be difficult to revive the industry, because the high prices of mercury have led to the adoption of satisfactory substitutes on an unexpectedly large scale.

Other metals obtained in comparatively small quantities might also be mentioned; for example, cadmium, which is found almost exclusively in zinc ores, is produced only by the large zinc smelters. The American Smelting and Refining Company has been producing large quantities of cadmium in Mexico. In 1930 the output in the United States was about 2,700,000 pounds, while Canada produced some 460,000 pounds, Poland 207,000 pounds, Mexico 1,200,000 pounds and Tasmania 520,000 pounds. There is no cadmium cartel, but prices are fairly steady, since most of the metal is sold under long term contracts. Cadmium is used in paints and is required in large quantities in electroplating, a field in which it competes with nickel and chromium.

Little chromium is bought and sold in metallic form, most of it being traded as ore or alloyed with iron. The most important ore deposits are in Rhodesia, India, Russia, Cuba, Cyprus, Turkey, New Caledonia and Greece. Metallic chromium is gaining wider use as an electroplating metal, especially for building construction and automobile parts. Chemical compounds of chromium are of considerable importance in the leather industry.

Cobalt, which like chromium is often alloyed with iron, is chiefly produced in Canada and in the Belgian Congo. The world output has averaged 1,800,000 pounds during recent years. In 1928 production was equally divided between these two countries, but the Belgian share has recently risen to two thirds. The sale of the metal in Europe is controlled almost exclusively by Vickers-Armstrong, the British steel concern.

Tungsten, which is mined mainly in China and Burma, is of great importance in the manufacture of incandescent lamps. The successful

drawing of tungsten wire has aided considerably the growth of this industry. The international incandescent lamp cartel is based upon control of patents covering the process involved. Most of the metal is used in the steel industry; steels alloyed with tungsten are especially suitable for high speed cutting tools and drills.

Antimony, which is of importance in paint manufacturing, is produced almost exclusively in China. It is also obtained from antimony bearing lead ores. The metal is much used to harden lead, as in the manufacture of buckshot and shrapnel.

The production of bismuth, most of which comes from Bolivia, is regulated by an international cartel which is under the control of British commercial firms. The use of bismuth, at least in its metallic form, has greatly diminished of late. Bismuth salts (e.g. subnitrate and nitrate, subgallate) are of importance in pharmacology. As the metal melts very easily, it is used to some extent in the manufacture of automatic fire alarm equipment.

There is a considerable movement of metal ores, concentrates and crude metals as well as of semifinished and finished metal products between the several countries and continents. The Americas, Africa and Australia are "surplus" continents, while Asia also has a surplus of mine production over smelter production. Europe, however, is a "deficit" continent in both mining and smelting. In 1929 the world exports of pig iron amounted to 2,700,000 tons; total exports of crude iron and steel by Great Britain, Germany, France and the United States aggregated over 16,600,000 tons. In the same year there were 405,800 tons of zinc exports, 723,400 tons of lead exports and 875,900 tons of copper exports, exclusive of exports of semifinished and finished products containing these metals (Table x), besides large exports of other metals. In fairly normal years approximately 70,000,000 tons of metals and metal products, the major item being iron and steel, are shipped from one country to another. A comparison with other commodities provides an indication of the economic importance of metals in the world's economy—in the fiscal year 1928-29, for example, the wheat imports of forty-one countries totaled approximately 25,000,000 tons and the cotton imports of twenty-two countries, 3,500,000 tons.

The foreign trade in metal ores and raw metals is affected by the control of ore reserves by monopolistic combinations, cartel regulations,

TABLE X
IMPORTS AND EXPORTS OF CRUDE COPPER, LEAD AND ZINC, 1929
(In thousands of metric tons)

	COPPER		LEAD		ZINC	
	IMPORTS	EXPORTS	IMPORTS	EXPORTS	IMPORTS	EXPORTS
Germany	194.6	31.8	136.8	22.4	136.2	38.0
Austria			9.6	1.1	8.2	0.4
Great Britain	156.2	19.9	297.1	31.6	144.7	137.6
France	146.8	1.7	96.5	4.8	39.3	14.6
Belgium			31.3	20.9	6.9	71.5
Spain	1.2	7.4	0.2	99.6	0.9	3.5
Italy			24.7	0.1	8.3	1.2
Japan	4.9	2.1	60.6		27.1	
United States	77.4	373.4	1.5	66.5	0.2	13.1
Canada	17.6	67.3	0.5	103.6	1.2	61.3
Mexico	0.7	65.0	0.2	216.3		
Australia	0.1	3.1		156.5		32.3
Sweden	25.1	3.3				
Chile		300.9				
Poland					0.2	32.3
Total	624.6	875.9	659.0	723.4	373.2	405.8

Source: Compiled by the author.

tariffs and the "metal politics" of the major producing and consuming countries. Metal politics, in addition to considerations of imperialistic policy, are affected by problems of the international location of the metal industries and by efforts to overcome disparities in production and foreign trade. While metal deposits are widely spread, many are concentrated in particular areas; and every country requires some metal which is not available within its own borders. The deposits themselves cannot be changed; all that can be done is to discover and exploit them more intensively. When the deposits are exhausted in any one country, needs must be supplied from foreign sources. It may happen, as was the case in the Upper Silesian iron industry and in Belgian zinc smelting, that large plants lose their domestic ore basis. They must then obtain other sources of supply either by ownership of foreign ore reserves or by means of long term contracts. The latter eventuality, however, transforms the economic basis of such smelting concerns; instead of being "mixed" mine and smelting concerns they become "pure" smelting concerns. If they cannot acquire foreign ores they may have to shut down, as was the case with the giant tin smelters erected in the United States during the World War. As a general proposition domestic ore needs begin to be met by imports (in addition to outright exhaustion of local supply) whenever production costs plus freight charges to the smelting plants are higher for domestic ores than for foreign ores.

Disparities in the distribution of metal reserves create important economic and political

differences and conflicts—between private, fiscal and general interests, between one country and another. Governments are increasingly supplementing or supplanting mining legislation; they are also establishing or multiplying taxing agencies, creating state monopolies, introducing the principle of concessions instead of grants, the use of quotas and price fixing for domestic and foreign markets, the partial exclusion of foreign concessionaires and, finally, the imposition of tariffs. The situation is further complicated by the imperialistic policies of governments and monopolistic combinations which seek control of foreign mineral resources and the displacement of competitors.

The "metal politics" of different countries are of the utmost importance in the development of economic and international relations. When France proposes to prohibit the exportation of iron ore or to subject it to governmental control, it is obvious that the action would have far reaching results. One of the reasons advanced for the organization of Copper Exporters, Inc., was the diminution of the American copper ore reserves, the argument being that further depletion should be prevented by a reduction of copper metal exports. During the crisis the governments of Bolivia, the Federated Malay States, the Dutch East Indies, Nigeria and Siam have enforced a strict regulation of the output of tin, since unregulated production involves steep price declines, which might force both the industry and the state treasuries into bankruptcy. Colombia has established a board of control to restrict exports of platinum. Everywhere there

is a pronounced trend toward governmental intervention in the metal industries in an effort to equalize international disparities.

ALFRED MARCUS

See: MINING; MINING ACCIDENTS; MINING LAW; COINAGE; GOLD; BIMETALLISM AND MONOMETALLISM; IRON AND STEEL INDUSTRY; MACHINES AND TOOLS; TECHNOLOGY; INDUSTRIAL REVOLUTION; COMBINATIONS, INDUSTRIAL; CARTEL; RAW MATERIALS; NATURAL RESOURCES; IMPERIALISM.

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MÉTAYAGE. See FARM TENANCY; PEASANTRY; SMALL HOLDINGS.

METHOD, SCIENTIFIC. The progressive character of science shows that its essence is to be sought not in the content of its specific conclusions but rather in the method whereby its findings are made and constantly corrected. The term method denotes any procedure which applies some rational order or systematic pattern to diverse objects. As used with reference to science, its meaning varies from that of abstract, or formal, logic applicable to all statements to that of the technique which may be peculiar to a particular science or even to some special field in it (e.g. the method of just perceptible differences in psychology or the method of index numbers in economics).

This distinction makes it possible to eliminate current but needless methodologic controversies by recognition of the fact that the social sciences differ from one another and from the physical sciences in regard to their techniques while they all agree as to their general logic as sciences. It is well also to recognize that while in its oldest and widest sense the term science (like the German *Wissenschaft*) denotes all ordered and reliable knowledge—so that a philologist or a critical historian can truly be called scientific—the stricter sense of the word science makes it especially concerned with general laws which establish connections between diverse facts. The various sciences thus differ in the degree of generality which they have attained.

From the widest viewpoint scientific method may be regarded as the way of increasing the reliability of beliefs or assumptions by eliminating or minimizing as far as possible the errors and illusions which obstruct human knowledge. Science aims at stability of belief by cultivating rather than suppressing doubt. In constantly asking "Is it so?" it seeks to question all that can possibly be questioned. The mere resolution, however, to doubt all things is of little efficacy, as the illustrious case of Descartes shows. What is most in need of doubt is apt to appear as indubitable (e.g. innate ideas). There is needed therefore a technique for questioning every proposition so that a wider or more stable basis for the whole system of beliefs may be found.

Logic and mathematics are such techniques in that they show possible alternatives to usual ideas. The techniques for raising doubt as to assumptions concerning individual facts consist in showing possible contradictions between one factual assumption and another. To do this effectively we repeat the observation of what are supposed to be the facts, either under the same conditions or under varying conditions, so that distorting influences may be eliminated. Modern physical methods are thus used not only to make observations more accurate, that is, to obtain a refinement of perception unobtainable with the unaided senses, but also to prevent the common illusion of seeing what does not exist. In the case of facts not directly observable one relies on the method of questioning the evidence in their favor.

The foregoing considerations may thus be put positively: science is a method of basing beliefs on the best available evidence. Logical proof or demonstration, not only in geometry

and arithmetic but in all the fields of science, reduces possible doubt as to a large number of propositions to that of a few simple principles. The proof of a proposition makes it impossible to deny it without denying the axioms and other propositions from which it is deduced.

From the nature of evidence it is clear that no one fact can prove another fact unless the two are connected by some constant or invariant relation. Scientific method is thus an effort to make explicit, and to test, the laws according to which phenomena are related to each other to form a system. A dictionary or a railroad time table is not generally regarded as a work of science. For the latter must be more than a collection of facts, even if they be organized according to some external order, such as the alphabetic or chronologic one. The ideal of science is to see the facts logically connected according to their essential nature, summarized in some small number of connecting laws or principles.

Thus far scientific method has been considered as a way of perfecting knowledge. Is it also a way of extending knowledge? If an affirmative answer is given, the obvious caution must be added that there are no magical rules which will enable man to discover all that is unknown—no more than there are rules enabling him to invent everything that he needs or to create great works of poetry or music. If there were such rules, he would long ago have discovered the causes of phenomena which for ages have puzzled and baffled. The verifiable history of science shows that there is an element of unpredictable good fortune and unaccountable genius in most great discoveries.

But while there are no rules or methods which will produce scientific discoveries or inventions, there are certain necessary conditions which must be observed in order not to make the effort at discovery impossible. Previous knowledge and reflection are such necessary (though insufficient) conditions. Great scientific achievements are never made by those who start with an open mind without any knowledge or anticipation of nature. In order to find something we must first look for it. And the process of formulating new hypotheses or new experiments to test old hypotheses, while it requires original insight, is necessarily dependent on logical deduction from previous knowledge. Deduction is thus a necessary part or instrument of research.

Confusion on this point has resulted from the Baconian myth of induction according to which

the true scientist begins with the observation of the facts without any anticipations of nature. It is important to realize that this is logically impossible and belied by actual history. Without an anticipatory idea or hypothesis we do not know what specific facts to look for and cannot recognize what is relevant to the inquiry. It is not easy to start with observing the facts, for to determine what are the facts is the very object of scientific inquiry.

While logical analysis or deduction can assure true conclusions only if we start with true premises, it aids scientific research and discovery in three ways. In the first place, it helps in detecting the questionable assumptions logically involved in what is believed to be the truth, and it multiplies the number of available hypotheses by formulating the possible alternatives to those which have been tacitly assumed. Logical reflection is needed to liberate one from the habit of regarding the familiar as the only possibility. In the second place, the logical deduction of its consequences makes clear the meaning of any hypothesis and thus assists in the process of testing or verifying it. Finally, the process of rigorous deduction is an aid in the attempt to steer clear of irrelevancies, and thus when the right principle is found it serves as a key to unravel our puzzles. This explains the great fruitfulness of mathematics in physical research. Such predictions as that of conical refraction by Hamilton, that of light pressure and electric waves by Maxwell and that of the bending of light rays and certain shifts in the spectrum by Einstein are a few striking instances of physical discoveries induced by purely theoretic consideration.

When in 1903 Bertrand Russell asserted that induction was more or less methodical guesswork, the intellectual world was rather shocked. This reaction was due to a false pride which makes people dislike to admit that guessing can be a part of scientific method. Nevertheless, such is clearly the case, whether the guess be called an intuition, an anticipation of nature or a working hypothesis. Scientific guessing is distinguished, however, by its methodical character, by the fact that it is recognized as a guess and that there is an organized way of testing its chances of being true.

The simplest form of induction is that of generalization from instances which are judged to be typical or representative of the classes to which they belong. Thus, if a certain serum cures X, Y and Z who suffer from pneumonia,

there is a temptation to generalize that this serum is a cure for all cases of pneumonia. This is an inference which has greater or less probability according to the homogeneity of the class of cases called pneumonia. In physical nature, where uniformities are simpler and more readily observable, a single test as to whether or not a new organic compound is acid will be sufficient. In human affairs, where heterogeneity is very great, it is more difficult to determine to what extent certain instances are representative or typical of a special variety rather than of the whole class. It is thought, for instance, that because fifty or one hundred Jews or Chinese have certain characteristics, all the others have them. But here one is obviously laboring under the difficulty of having unknowingly selected some special group, such as those belonging to a special society engaged in a special industry or coming from a special geographic region. Hence to increase the reliability of inductions, as many instances as possible are taken at random; that is, distributed over wide ranges. In this way it is hoped that the fallacy of selection will be eliminated; that is, that the sample will be characteristic of the whole class rather than of some unrecognized variety. But no generalization can escape the possibility of being false or inadequate, because it is based on observed conditions which are themselves conditioned by unobserved ones which may change with time. The so-called principle of the uniformity of nature, or the maxim that like effects are brought about by like conditions, cannot do away with this difficulty, which arises from our limited knowledge.

The logically unsatisfactory character of mere generalization from samples or instances was recognized by Bacon, and methods of overcoming it were elaborated by J. S. Mill under the head of the methods of agreement, difference and concomitant variation. Mill, however, did not clearly discriminate between induction as generalization—"finding the causes"—and the element of proof. As direct prescriptions for discovering the causes of things these methods are, as the history of science shows, of little practical worth. For the very way in which these methods are formulated indicates that unless the causal "circumstance" is already included in the relevant factors, it cannot be discovered by any of these methods. These methods are, however, valuable in eliminating proposed causes. Thus the method of agreement shows that if a proposed cause is not a uniform antecedent it must

be rejected. The method of difference indicates that if a factor is not a differential one (one that is present in all instances when the phenomenon is present and absent in all instances when the phenomenon is absent) it is not a true cause. Finally, the method of concomitant variations proves that if two factors do not vary concomitantly they are not causally related. These methods of induction thus neither prove nor directly discover laws but they show which of a number of alternative hypotheses can be best verified.

It is principally in connection with the method of concomitant variations that statistics are useful in the establishment of laws or causal relations. Of course no empirical correlation can establish necessary relations. Indeed high correlations may often be discovered between factors which cannot have any real direct connection. But the establishment of correlations helps to confirm some hypotheses, and its failure helps to disprove others. For this reason it is a fallacy to suppose, as is often done today, that any developed science can remain in the statistical stage. Physics is not satisfied with empirical formulae, but always seeks to deduce them from some general principle, thereby establishing some real identity or invariant relation, e.g. the constancy of the amount of energy in all physical transformation. Thus what is called statistical mechanics is not empirical at all, but is rather a mathematical deduction from certain assumed relative frequencies of various minute configurations in nature.

In passing from scientific method as a whole to scientific method in the social sciences it is well to begin with the general admission that social phenomena are dependent on physical, biologic and psychologic factors. From this it follows that social phenomena are inherently more complex, depending on a larger number of variables. Hence the postulate of determinism, that everything is governed by law, does not assure the discovery in the social field of such relatively simple laws as prevail in physics. For obvious subjective and objective reasons experiments on men and societies cannot so readily be made or repeated as can experiments on samples of inert carbon or hydrogen. The former cannot be observed with the same degree of freedom, accuracy and detachment as the latter; and in the social field it is impossible to vary one factor at a time and to be sure that the others have remained the same.

In addition to these differences it is important

to note that the temporal or historical factor enters into social phenomena to a much larger extent than into purely physical phenomena. Men, communities and customs grow; and the present complexion of such entities is a function of their past history, to an extent which is not true of physical entities. There are, to be sure, certain physical phenomena, such as hysteresis in magnetism, in which the past enters. But these are exceptional cases, whose dependence on history is expressible in a relatively simple function. This is certainly not true of religious, moral and political affairs; more history is needed for an understanding of the reaction of a Bulgarian to a Serb than for an understanding of the reaction of water to an electric current.

Because different peoples have had different histories it is hazardous to compare the institutions of one with those of another. In order to overcome this difficulty men like Comte and Spencer have resorted to the arbitrary hypothesis that all peoples must go through the same series of stages in their history and that therefore different peoples may be compared in the same stage of their development. But such oversimple *a priori* hypotheses are not supported by the facts of history or anthropology. The supposed law that all peoples must go through the nomad, or pastoral, stage before reaching agriculture cannot be true of peoples like the Peruvians, who never had a sufficient supply of cattle; and the supposed law that the matriarchal form of family must precede the patriarchal form is freely disregarded by tribes like those of British Columbia, which for social reasons of their own have veered in the opposite direction. A good deal of the work of men like Montesquieu must be rejected, on the ground that we cannot significantly compare the institutions of diverse societies which are not similarly organized. For this reason it is also hazardous to interpret puzzling phenomena as survivals of practises which were once rational in purpose. What seems simple and rational to an outside observer may not be so to those whose lives are bound up with it, and vice versa.

Nineteenth century writers did in fact stress the historic approach in the study of law, economics, politics and religion—even in art and philosophy. But it soon became obvious that no significant history can be written unless it is assumed that events are connected in certain ways, and this means an avowed or tacit theory of social causation. In geologic history the assumed principles of physical causation are

explicit and subject to direct experimental or differential observation. In social history the assumed principles of economic, political or social causation are apt to be tacit, but they are none the less operative in determining what are regarded as the facts, certainly in determining what are regarded as the leading and most significant facts. For no history can record everything, and what is selected is determined by the theoretic point of view. Intelligible history, then, presupposes theories of economics, politics, psychology and the like.

The distrust of pure theory comes also from those interested in the practical manipulation of present social situations; for purely abstract study affords an insight only into certain phases of life and does not provide the complete knowledge needed for determinate choices. Thus theoretic economics tells only what would happen under certain conditions if all other factors remained the same. Those, however, who begin with the study of concrete phenomena cannot make any prediction except on the assumption that certain conditions are bound to have certain results; that is, on the assumption of certain laws as to what is possible. Their theory is thus tacit rather than critically examined.

A more rational ground for the distrust of pure theory in the social field is the fact that every investigator feels free to use his own categories. If these are expressed in common words, all sorts of ill defined penumbras of values and meaning are attached to them and clarity becomes difficult of attainment. There can be no generally recognized set of categories expressed in technical terms without more attention to the purely logical problem of the relation of the various fundamental social categories to each other. But the search for a set of elemental categories in the social sciences, such that all others are combinations of them, is a long process which no one can hope to complete in a single lifetime. There are therefore bound to be as many sociologies, or sets of social laws, as there are sociologists, each of whom starts afresh because his predecessors have not demonstrated anything which he is bound to take into account.

There are thus two main schools of method in the social sciences. On the one hand, there are those who, like the mathematical or theoretical economists or those engaged in juristic theory, are willing to start with purely abstract rules or formulae, develop them rationally and correct them by other considerations so that the results fit the actual course of events. On the

other hand, there are those who follow the historical and descriptive approach, which begins with ordinary notions and tries to refine them more and more by making them more definite, removing contradictions and supplementing them by fruitful analogies or comparisons.

It is often wise to begin by concentrating on what seems a typical instance or to pay special attention to a single case in which some essential social relation may be studied. We can thus, like the followers of Le Play, study the interplay of economic and other social factors by taking some cultural or geographic unit, e.g. a river valley. American anthropologists, following Boas, have used the concept of the culture area to great advantage. Instead of studying the American Indians as a whole, they take a special group and trace the pattern of its communal activity.

Such intensive study of special cases can obviously be fruitful only when they are in fact typical and when the student brings to his task a wide knowledge and a penetrating analysis of the relevant factors. The mere accumulation of particular facts is not and cannot of itself be enlightening nor can it widen scientific vision.

There has been considerable heated controversy as to whether the normative, or teleological, point of view is legitimate in the social sciences. This, however, involves two separate questions. The first is whether the investigator should pass judgment on events or social institutions on the basis of his own set of values. To do so is to introduce the investigator's personal preferences where what is needed is a study of the social objective. On the other hand, it is so difficult for most people to suppress their own evaluation of social situations—those who have preached this course, like Duguit and Gumpowicz, have failed to practise it—that it may be better to be frankly subjective than to pretend to an objectivity one does not really have. The right path obviously depends upon the investigator's equipment. The second question is whether social phenomena are determined by the purposes men have in mind or whether the latter are largely illusory or mere registrations of what objective circumstances determine men to do. Here as in other controversies the antithesis is too sharply drawn. If conscious human purposes are organically conditioned, there can be no good reason for ignoring them as clues to the whole social process. All social acts are regulated, and most men sometimes deliberate upon, and often ask, what

is the proper aim to be followed. Thus language, clothing, the ritual of business, courtship and even leave taking of the dead are regulated by social custom in such a way that a knowledge of social purpose is certainly needed for a full understanding of what is going on. On the other hand, men often take a microscopic view of their own conduct, while the social investigator must take a macroscopic view. The man who marries and brings children into the world does not usually aim at increasing the national population or the voting strength of his religious group. Men also are undoubtedly under serious illusions as to their purposes in their action and as to the extent to which the latter is really as planned as their vanity makes it out in retrospect. Men do calculate and make mistakes. But the extent to which this is true is an empirical question to be determined by actual measurement and not to be affirmed or denied *a priori*.

Until recently scientific method has been studied mainly by logicians interested exclusively in the nature of individual thought. One may, however, ask why it is that men who are careful thinkers in their specialty (e.g. in physics) are generally no better than the rest of the community when they reason about religion, politics or social and domestic economy. This suggests that scientific method is a trained and specialized habit which like all trained habits is socially conditioned. There is doubtless some organic basis for the fact that men put more of their intellectual as well as of their other energies and attention into some one field. But there can be no doubt that social organization largely determines the special or professional standards of care which are required in different fields of learning. Thus it is habitual for physicists and chemists to distrust naked observations and to resort to various mechanisms, repetitions and mathematical calculations to establish their facts; for biologists to use controls to check their experiments; for philologists to verify their quotations and references; or for lawyers to establish the relevance and competence of testimony. These cautions are organized so that no one can omit them and maintain his professional standing. Sometimes indeed these habits become mechanical. We forget their rationality and oppose any extensions or improvements of them which men of genius discover; but the merits of these progressive extensions are bound to be recognized so long as science by its fundamental procedure remains a self-corrective system.

Scientific method is generally thought of as peculiar to recent western civilizations. This view has been supported by sensational reports about weird, magical religions and cosmological beliefs of primitive peoples and even of mediaeval Europe, as if similar beliefs could not also be found among those called civilized. Contemporary anthropologists have, however, shown the wide prevalence of careful technical knowledge which is deliberately cultivated among most primitive hunters, fishermen and artisans as well as among priests and medicine men. Thus many peoples, like the ancient Chinese, indicate a deliberate study of how to prepare for certain modes of warfare. When, however, one compares the cumbrous learning of Egypt and other oriental countries with the rational science which the Greeks discovered from the days of Thales and Pythagoras to those of Archimedes and Ptolemy, one can well say that scientific method is a Hellenic discovery or invention, in the sense that the Greeks discovered the way of strictly logical demonstration, thereby using simple and comprehensive principles to transform vast conglomerations of miscellaneous facts into ordered systems. This is connected not only with the aesthetic sense of the Greeks but also with their habits of free society. Free doubt and free inquiry naturally go together with freedom from paralyzing fear or awe of authority. Oriental treatises are generally the stark dicta of masters to submissive disciples. The Greeks characteristically wrote dialogues, reasoned arguments or communications to friends. In any case the Greeks certainly discovered and developed mathematics as the art of proving general theorems.

Modern science is frequently not as rigorous in its procedure, but it has greater facilities for cooperation in its search. Modern methods of investigation depend upon a vast system of learned societies, communications and publications which make the results of any man's research very soon available to all others interested. Also through numerous records and libraries different generations can utilize such work of their predecessors as did not find immediate application.

While it is generally recognized that modern technology is the outcome of the development of scientific method, the reverse is also true in a limited way. Abstract mathematics has been enlarged by application to the problems of physics and the latter has been enriched by facing the problems of engineering. In the theoretic mechanics of Galileo there is an acknowl-

edgment of his observations of the methods followed by the expert workers in the Venetian arsenal; and the ideologists of the present Soviet regime in Russia are emphasizing the technological as well as the economic development which conditioned the work of men like Newton. In reply it might be urged that the history of medicine and technology shows that interest in practical applications does not always advance scientific methods and indeed that experimentalists of a very high order of rectitude, like the late Professor Michelson, were afraid to go into any field of physics having immediate practical applications. But waiving the latter point and admitting that scientific method may be enlarged by practical applications, one must still be on guard against confusing questions of historic conditions with those of the logical content of a book like Newton's *Principia*. In any case there can be no reasonable doubt that the latter was molded by the reading of Euclid and Pappus as well as of Kepler and Galileo.

In raising the question as to the social needs which make for scientific method it is well to recognize at the outset that the suspension of judgment which is essential to the latter is difficult or impossible when the demands of immediate action are pressing. When a house is on fire, its owner must act quickly and promptly; he cannot stop to consider the possible causes or even to estimate the exact probabilities involved in the various alternative ways of reacting. For this reason those who are bent upon some specific course of action often despise those devoted to reflection; and certain ultramodernists seem to argue as if the need for action guarantees the truth of one's decision. But the fact that a person must either vote for candidate X or refrain from voting does not of itself give him adequate knowledge. The frequency of regrets makes this obvious. Wisely ordered society is therefore provided with means for deliberation and reflection before the pressure of action becomes irresistible. In order to assure the most thorough investigation all possible views must be canvassed, and this means toleration of views which are *prima facie* most repugnant.

In general the chief social condition of scientific method is a widespread desire for truth strong enough to withstand the powerful forces which make people either cling tenaciously to old views or else embrace every novelty because it is a change. Those who are engaged in scientific work need not only leisure for reflection and material for their experiments but also a com-

munity which respects the pursuit of truth and allows freedom for the expression of intellectual doubt as to its most sacred or established institutions. Fear of offending established dogmas has been an obstacle to the growth of astronomy, geology and other physical sciences; and the fear of offending patriotic or respected sentiment is perhaps one of the strongest hindrances to scholarly history and social science. On the other hand, where people indiscriminately acclaim every new doctrine, the love of truth becomes subordinated to the desire for intellectual novelties. The safety of science depends on the existence of men who care more for the justice of their methods than for the value of any results obtained by using them. For this reason it is unfortunate when scientific research in the social field is largely in the hands of pedagogues and others who are generally not in a favorable position to oppose established or popular opinion.

These reflections may be stated in another way: the physical sciences can be more liberal because there is more certainty that foolish opinions will be readily eliminated by the shock of facts. In the social field, however, no one can tell how much harm may come of foolish ideas before their foolishness is finally, if ever, demonstrated. None of the precautions of scientific method can prevent human life from being an adventure, and no scientific investigator knows whether he will reach his goal. But scientific method does enable large numbers to walk with surer step. By analyzing the possibilities of any step or plan it becomes possible to anticipate the future and adjust oneself to it in advance. Scientific method thus minimizes the shock of novelty and the uncertainty of life, so that man can frame policies of action and of moral judgment fit for wider outlook than those of immediate physical stimulus or organic response.

MORRIS R. COHEN

See: SCIENCE; PHILOSOPHY; LOGIC; DETERMINISM; ECONOMICS; POLITICAL SCIENCE; PSYCHOLOGY; SOCIOLOGY; ANTHROPOLOGY; JURISPRUDENCE; HISTORY AND HISTORIOGRAPHY; STATISTICS; PROBABILITY; CORRELATION.

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METHODISTS. See SECTS.

METROPOLITAN AREAS. Metropolitan areas and their problems are not new nor is the dislocation between population and the units of local government, the characteristic of such areas, a novelty. London in the latter part of the eighteenth century and Philadelphia in the second and Boston in the third quarter of the nineteenth century faced acute metropolitan problems. It is only in the twentieth century, however, that metropolitanism has become universal and of vast quantitative importance. The relation of population to the center of an urban

region has always been the resultant of land values and the means of transportation. Industry and population tend to escape the high property values of the center. The movement may be checked by artificial barriers, such as the walls of the mediaeval city, or by natural ones in the form of hills, rivers or marshes; but the principal restraint upon it has been the cost in time and money of transportation. The sudden relaxing of this restraint through the common use of the automobile has suddenly created metropolitan areas of unprecedented size and importance.

The mediaeval city fast within its walls could grow only vertically. When the walls disappeared before the potentialities of gunpowder, population still spread slowly because in the absence of means of mass transportation the ordinary man must live near his work. With the development of steam railways came "satellite" communities, residential or industrial, dependent economically on the center but far enough removed from it to raise no problems of government. The trolley car gave a strong impetus to the outward movement, but only cheap automobiles and concrete highways (built with taxes for the most part contributed by the center) made it possible for vast numbers of urban workers to seek the countryside and for industries to find at a distance from the center cheap land without the loss of their labor supply. At the same time the old city has not only maintained but actually increased its dominance as a center of trade, banking, amusement and culture. The whole increasing population—the overtaken farmer as well as the invading suburbanite—more and more seek the stores, theaters, churches and professional services of the center to the detriment of the crossroads store, the wayside church and the country doctor. A nation has been put on wheels, and its mobility has created metropolitan regions with common political problems and no adequate machinery to solve them.

It is difficult to define exactly just what constitutes a metropolitan area. The Bureau of the Census has adopted what might be called the definition of continuous density: the area is made up of the "central city or cities" and "all adjacent and contiguous civil divisions having a density of not less than one hundred and fifty inhabitants per square mile." Usually there are also included civil divisions of less density directly contiguous to the central city or entirely or nearly surrounded by minor civil divisions

having the required density. A broader definition based on economic and social conditions is the area within which there is a large daily movement of population to and from the center for work, trade, amusement or other purposes. This definition will include in the metropolitan area relatively distant subcenters and often large stretches of open country. The typical metropolitan area presents aspects of both uniformity and diversity. No metropolitan area is identical with a single compact urban community. This fact affects the means available for the solution of the metropolitan problem.

The problems which confront a metropolis are similar in kind to those of any local government. They derive their peculiar character from the absence of political integration in the metropolitan community. The New York metropolitan area, according to the Committee on Regional Plan of New York and Its Environs, contained in 1925 the whole or parts of 22 counties, 290 incorporated places and 146 unincorporated towns or townships; its estimated population in 1927 was put at 10,000,000. The Philadelphia metropolitan area as described by the Regional Planning Federation of the Philadelphia Tri-State District consisted in 1926 of 14 counties, 129 incorporated places and 211 townships; its estimated population was 3,000,000 in 1926. These are only outstanding cases of what is to be found in each of the ninety-six metropolitan districts enumerated in the 1930 census. In no case is there any unit of government corresponding to the metropolis as a whole. Transportation, to take a single example, is an important element in local life with which local governments must have a great deal to do. It is obvious that the transportation problem in a metropolitan area cannot be satisfactorily handled by hundreds of separate units whose only method of common action is more or less accidental cooperation. Many of these metropolitan problems can be solved only by state centralization or by metropolitan consolidation.

The principal problems calling for metropolitan integration relate to four main categories of functions: community planning, including provision not only for streets but for parks and other recreational facilities; public works and utilities, such as water supply, sewerage, mass transportation and to a lesser extent the furnishing and control of gas, electricity and telephone services; safety, including the maintenance of a police force and an adequate public health authority; and, finally, the establishment and

conduct of institutions for the care of the poor and the sick and for public education. These problems arise from physical, administrative or financial causes or from combinations of such causes. Nature demands that a whole region be planned and that a natural drainage area be treated as a unit. Flying thief and hurrying pestilence will not pause for the boundaries of petty municipalities and townships. A common standard of essential services cannot be maintained by a great central city and wealthy suburbs and by the poorer units to which working men have fled to escape the high cost of city life. This is peculiarly true where, as in education, per capita costs often vary inversely with the size of the unit.

As long as the absence of means of transportation allowed cities to grow only by the addition of new streets and buildings to the already developed area, the process of annexation although it often lagged far behind physical development could be counted on in the long run to adjust the relations between the real and the political city. The recent outthrust of population, however, has been so overwhelmingly rapid and so far flung in its extent that annexation in most cases cannot even be thought of as a solution of the metropolitan problem. Sometimes the flood has engulfed numerous outlying municipalities with traditions of independent existence, ample resources and high local patriotism. Often the outward moving population has not uniformly occupied the area; between transportation lines and places favorable to residence or industry great stretches of open country remain, in which the conditions of life are not typically urban, interspersed with concentrated settlements which make it impossible to dissect them from the metropolis. Both these conditions present almost insuperable obstacles to annexation. The independent municipalities of fair size and strong local traditions persistently resist such unions and since the annexation of Allegheny to Pittsburgh in 1907 no serious attempt has been made to compel the annexation of such units by legislative fiat. Moreover the diversity in the character of the units which make up a metropolitan area makes annexation an expedient of very doubtful value. Only one great city, Los Angeles, has undertaken annexation on a metropolitan scale and its experience has illustrated the dangers of the situation. Property owners in every part of the city, irrespective of the nature of their immediate surroundings, seem to feel themselves entitled to all the usual services

rendered by a city government. A great stimulus is thus given to municipal improvements in advance of population and to expenditures far in excess of the tax contributions which can be made by the outlying sections.

Since annexation cannot and probably should not be made to meet the situation, special districts have often been created to deal with some exceptionally acute problem or problems. The first of these was the Metropolitan Police District of London, established in 1829 at the instance of Sir Robert Peel; since then they have become relatively common. In the United States and Canada alone from 1910 to 1930 some twenty such districts were set up or their range of activities materially amplified. Special districts of this kind may be divided into four classes: those in which the governing body is appointed by and responsible to the central government; those in which the governing body is made up of representatives chosen by the governing bodies of the constituent units; those in which the governing body is elected directly by the people of the district; and those in which the governing body represents chiefly the interests concerned in the activities of the district.

The most famous example of the first class is the Metropolitan Police District of London. In the United States the most notable example is the Massachusetts Metropolitan District Commission, which since 1919 has dealt with metropolitan sewers, water and parks in the Boston area. To the second class belong numerous districts established in Great Britain and the British colonies, among them the Metropolitan Water Board of London set up in 1902 and the Montreal Metropolitan Commission created in 1921. The syndicates of communes provided for by the French municipal code, and the wartime and post-war municipal "unions" of Germany fall in the same category. In the United States the only clear cut example is the Metropolitan Water District of Southern California, established in 1930 to bring water from the Colorado some two hundred and fifty miles away to cities in the Los Angeles coastal plain. The third class includes the Sanitary District of Chicago created in 1889, the East Bay Municipal Utility District in California created in 1923 and some others. The fourth class is well represented by the Port of London Authority established in 1908 and at present consisting of eighteen members elected by payers of port dues, wharfingers and owners of river craft and ten members chosen by public bodies. Its successful conduct

of a colossal enterprise would seem to invite imitation, but it has met with considerable political opposition.

The Port of New York Authority deserves special attention, as it falls readily into none of the above categories. It was created by compact, supported by concurrent legislation, between the states of New York and New Jersey in 1921. The commission consists of twelve members, six appointed by the governor of each state. They serve without pay for terms of six years. Its duties are to prepare a comprehensive plan for the development of the port, secure the best use of its existing facilities and construct, own and operate bridges, tunnels and other utilities. The running expenses of the commission are paid by the two states in equal proportion. It constructs works only by the sale of bonds secured by the pledge of the works themselves and their revenues. From the point of view of area and population concerned—1500 square miles and 8,000,000 people—this is the most important of ad hoc metropolitan authorities. Besides working out a comprehensive plan, parts of which have been carried out in cooperation with railroads, it has built the George Washington Bridge and been entrusted with the operation of the Holland Tunnel.

Although the services rendered by many of these special districts have been of enormous value, it is obvious that by their creation the metropolitan problem as a whole cannot be solved. It can only be palliated. Where several important functions have been entrusted to a single commission, as in the case of the Massachusetts Metropolitan District, one approaches very close to the federated city. But two good examples of this type of organization exist. One is the city of Greater Berlin, created by act of the Prussian legislature in 1920. The then existing city of Berlin and a very large surrounding area were included in this scheme. A government similar to that of other Prussian cities was set up for the whole of the *Grossstadt*, which was at the same time divided into twenty administrative districts, each with its own elective council, district burgomaster and administrative board (*Magistrat*). The municipal assembly of the *Grossstadt* was given the power to determine by ordinance the distribution of powers between the *Grossstadt* and the administrative districts. The plan has worked badly in certain respects. The great municipal assembly of 225 members became a field of party jousting, while the twenty administrative district councils became

practise grounds where the parties tried out their strength. In 1931 a law was passed modifying the organization of the *Grossstadt* in certain important particulars. This law provided a city committee, elected by the municipal assembly from its own number by proportional representation, to carry on most of the routine work formerly left to the unwieldy assembly. It also strengthened the power of the chief burgomaster and required the district councils to meet in private. It did not, however, seriously alter the division of powers between the *Grossstadt* and its districts. The districts have neither taxing nor borrowing power, and the budget is enacted by the municipal assembly and *Magistrat* of the *Grossstadt* in detail for both the *Grossstadt* and the districts. Thus the districts do not enjoy any real autonomy. Just what the districts can do is prescribed in the law; how they can do it is set forth in general regulations made by the central *Magistrat*. The central *Magistrat* may veto the acts of a district council which exceed its powers or are contrary to the interests of the city as a whole. The system is a deconcentration of administration rather than a true decentralization. Nevertheless, the matters left to the districts to administer are of great importance. The *Grossstadt* deals with such subjects as gas, water supply, electrical energy, sewers, fire protection and savings banks. All the other local functions, headed by education, are administered by the districts. Two interesting provisions are made to secure harmony between the districts and the *Grossstadt*. The district councils are made up in part of the members of the municipal assembly from the district; and the burgomasters of the several districts meet regularly with the chief burgomaster and *Magistrat* of the *Grossstadt* to discuss the budget and other important matters. There is much contention in Berlin between those who would prefer a higher degree of centralization and those, especially persons connected with the government of the districts, who would prefer a greater degree of district autonomy. But so far neither side has been able materially to alter the situation.

A much better example of the federated municipality is the Administrative County of London, which was established in 1888. Its boundaries include only a small part of the 4758 square miles which may properly be included in the London metropolitan area; but for 117 square miles of the area with a population of approximately 4,500,000 it provides a solution, which is at least extremely suggestive, of the

relation between local and general interests in a metropolis. The County Council and the twenty-eight borough councils functioning within the Administrative County do not differ materially in organization and procedure from the corresponding local bodies in other parts of England. They are unique only in the distribution between them of the usual functions of local government. In this division it is difficult to see any consistent principle. Some matters belong exclusively or almost exclusively to the County Council, such as fire protection, care of the insane, reformatories, education, poor relief and some licensing powers. Control of drainage is logically divided between the county and the boroughs, main drainage going to the one and local sewers to the others. With regard to streets, however, confusion prevails. Jurisdiction over street openings and improvements belongs to the County Council, but the actual construction and maintenance of all streets except the Thames bridges and embankment are left to the boroughs, which also light and clean the streets and superintend the collection and disposal of refuse. The County Council alone has power to operate tramways, but the borough councils can veto (and have frequently done so) any projected tram lines through their territory. In the field of public health the authorities are even further jumbled. As to parks and open spaces both have concurrent powers. Both have housing powers, except that the boroughs may not exercise such powers beyond their own limits. Both deal with the enforcement of the building acts. The County Council deals with the gas companies, but some of the boroughs maintain their own electric plants. Such an arrangement cannot produce entire satisfaction. Englishmen jeer at the borough councils as representing the nadir of English political life. When the Royal Commission on London Government in 1921 and 1922, however, came to take its seven volumes of testimony, not a single witness appeared before it to argue that for a municipality as large as London anything but this dual arrangement was possible. Although imperfect it works.

A better picture of the complexity of the metropolitan problem and of the added complications which come from attempts to solve it may perhaps be attained by a rapid glance at the London area as a whole. At its center lies the City of London (1.03 square miles in area) with its peculiar mediaeval constitution. Just outside it is the Administrative County (117 square miles in area) with its twenty-eight

boroughs and outside that a congeries of counties and smaller units within and without the Metropolitan Police District (691.8 square miles in area). Inside the Police District, for census purposes called Greater London, are parts of five counties, three county boroughs, twelve municipal boroughs, fifty-nine urban districts and nine rural districts. The area of the five so-called "Home Counties" (Essex, Hertford, Kent, Middlesex and Surrey), which is all within the metropolitan influence of London, is 4758 square miles, and within these five counties are more than two hundred of the ordinary units of local government. This is complexity enough, but attempts to solve certain metropolitan problems have doubled the confusion. There is a London main drainage area, including the Administrative County and the whole or parts of sixteen other units, under the control of the County Council. There is a Metropolitan Water Board with jurisdiction over a district of 530 square miles partly within and partly without the Police District. The London and Home Counties Electricity District handles the major electric light and power problem in a region of 1797 square miles, while the London and Home Counties Traffic Advisory Committee goes even further afield. In addition there are the Port of London Authority, the Port of London Sanitary Authority (a manifestation of the city corporation) and the Thames Conservancy and Lee Conservancy boards. Except for the abolition of boards of guardians in 1929 nothing has been done in a generation but to complicate the situation further.

It is impossible to prophesy the trend of metropolitan government except for the probability of a gradual increase in the number of special districts. Several attempts have been made in the United States to apply the federated city idea to the solution of the metropolitan problem. Such a project came very near adoption in Pittsburgh in 1929 and plans are now on foot for its renewal. In Boston an active committee appointed by the mayor has been working on such a proposal for the past three years, although without any legislative success. In Cleveland and St. Louis plans of this sort have been formulated and widely supported. No other general solution of the metropolitan problem has so far received real backing anywhere in the United States.

The testimony collected by the Royal Commission on London Government clearly brought forth the evils of the present situation there. But

consideration of the testimony evoked no unanimity as to means of solving the problem. The commission divided sharply within itself. Four members recommended a mildly innocuous addition to the complexity in the shape of a London and Home Counties Advisory Committee with somewhat vague functions relating to transport, town planning, housing and main drainage. Two groups of two members each recommended more drastic measures, but they differed widely and neither had the slightest chance of official or popular support. The fact is that the opposition of the influential county councils and of the larger independent municipal units within the area insures the defeat of any plan for extending the Administrative County over a larger area, and no other practical scheme can be suggested.

American experience is in the same direction. Even a scheme of federation allowing considerable autonomy to existing units is received with suspicion in the outlying communities. Political leaders in the suburban municipalities fear the loss of power. Residents of unincorporated areas are afraid of possible increases in taxation. Inequalities between the central city and outlying communities in the basis of assessment of property for taxation are difficult to adjust. Resistance is encountered also from the officials and politicians of the central city, who see diminution of their own importance in the transfer of certain city functions to the metropolitan government. Selfish interests and local politicians join hands in obstructing the development of metropolitan institutions. One reason for the relatively rapid creation of special districts is that they involve no interference with the existing machinery of local government.

On the other side must be counted the ambition of cities to enjoy as high a census rating as possible—a poor but very powerful motive—and the pressure which unsolved problems and high taxation exert in various parts of the metropolitan area. There are also groups which are steadily pressing on the public the necessity for some sound solution of the metropolitan problem. The city planners were the first to call attention to the phenomena of metropolitanism, and they have continued to take the lead in urging an intelligent, unified treatment of the problems of the metropolis. Their views have been ably seconded by municipal reform organizations, by the press and by chambers of commerce, although it must be admitted that the prospect of a "bigger city" has been most often

the prevailing motive in stimulating newspapers and commercial organizations to activity.

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See: CITY; CITY AND TOWN PLANNING; REGIONAL PLANNING; SUBURBS; MUNICIPAL GOVERNMENT; COUNTY-CITY CONSOLIDATION; ADMINISTRATIVE AREAS; MUNICIPAL CORPORATION; HOME RULE; COMPACTS, INTERSTATE; MUNICIPAL TRANSIT; LOCATION OF INDUSTRY.

Consult: *Die Verwaltungsorganisation der Weltstädte Paris, London, New York, Wien*, ed. by Walter Norden, Kommunalwissenschaftliches Institut an der Universität Berlin, Sonderschriften, no. i (Berlin 1931); Sellier, Henri, *Les banlieues urbaines et la réorganisation administrative du département de la Seine* (Paris 1920); National Municipal League, Committee on Metropolitan Government, *The Government of Metropolitan Areas in the United States* (New York 1930); Reed, T. H., *Municipal Government in the United States* (New York 1926) ch. xviii; Munro, W. B., *The Government of European Cities* (rev. ed. New York 1927) chs. ix, xx; Harris, G. M., *Local Government in Many Lands* (London 1926); Davies, A. E., *The Story of the London County Council* (London 1925); Robson, W. A., *The Development of Local Government* (London 1931); Harris, P. A., *London and Its Government* (rev. ed. London 1931); Masterman, C. F. G., *How England Is Governed* (London 1921); Raiga, Eugène, and Félix, Maurice, *Le régime administratif et financier du département de la Seine et de la ville de Paris* (Paris 1922), and *Supplément* (Paris 1928); *Die Zukunftsaufgaben der deutschen Städte*, ed. by P. Mitzlaff and E. Stein (Berlin 1925) p. 64-78; Körner, Walter, and Brell, Walter, *Berliner Ortsrecht* (Berlin 1925); Böss, Gustav, "Die Verwaltungsgemeinde Berlin und ihre Aufgaben" in *Zeitschrift für Kommunalwirtschaft*, vol. xviii (1928) 1675-80; Norden, Walter, "Berlin's New Government" in *National Municipal Review*, vol. xx (1931) 697-703; Regional Plan of New York and Its Environs, 8 vols. (New York 1927-31), and *Regional Plan of New York and Its Environs*, 2 vols. (New York 1929-31); Regional Planning Federation of the Philadelphia Tri-State District, *The Regional Plan of the Philadelphia Tri-State District* (Philadelphia 1932); Great Britain, Royal Commission on London Government, *Minutes of Evidence*, 6 vols. and index (London 1922-24), and *Report of the Commissioners*, Cmd. 1830 (1923); *Documents Illustrative of American Municipal Government*, ed. by T. H. Reed and P. Webbink (New York 1926) pt. xii; Cottrell, E. A., "The Metropolitan Water District of Southern California" in *American Political Science Review*, vol. xxvi (1932) 695-97; Lowrie, S. G., "Governing Our Metropolitan Areas" in *University of Cincinnati Law Review*, vol. v (1931) 186-96; Laski, H. J., *The Problem of Administrative Areas*, Smith College, Studies in History, vol. iv, no. i (Northampton 1918); United States, Bureau of the Census, *Fifteenth Census of the United States, 1930, Metropolitan Districts, Population and Area* (1932).

METTERNICH-WINNEBURG, FÜRST CLEMENS WENZEL LOTHAR (1773-1859), Austrian statesman and diplomat. Appointed

foreign minister shortly after Napoleon's victory at Wagram, Metternich set out to gain time in which Austria might recuperate from her succession of disastrous wars. For three years he held the balance between France and Russia, maintaining friendly relations with both until Austrian preparations should be completed; and even after he was convinced that Napoleon's empire was doomed he was unwilling to see the Napoleonic power replaced by Russian preponderance in Europe. At the Congress of Vienna he used the weight of his authority to effect territorial compromises and succeeded very largely in realizing his own program. Within the brief period of five years Metternich had raised Austria to the first rank among the European powers.

Metternich's untiring efforts, particularly after his elevation to the chancellorship in 1821, to preserve the essential features of the social and political status quo may be explained both by the peculiar needs of the Austrian Empire and by his own deep seated personal convictions. National unification and popular sovereignty constituted in his eyes not only a threat to the integrity of the state but a perpetuation of revolutionary heresies. Looking at social and political problems exclusively from the standpoint of the governing classes he had little sympathy with the aspirations of middle class liberals and nationalists. Since his early days in revolutionary Strasbourg and Mainz he had adhered unswervingly to his belief that the French Revolution in its overhasty attempt to emancipate the human spirit had seriously undermined religious morals, economic life and government; and that the movement, which was essentially an outgrowth of the "presumption" of the middle classes posing as "the people," had gained momentum only as a result of the weakness of the governments of Europe. Like Burke, Metternich sought human progress in historical evolution rather than in violent revolution. Declaring that the real task of government consisted in promoting the general welfare, in preserving order, in respecting historically acquired rights and in reforming slowly according to the needs of the country he used the full power of the state to control or abolish the press, secret societies, university agitation and all other manifestations of the revolutionary spirit. Although he postponed and obstructed the realization of liberalism and democracy he helped to bring order and an opportunity for recovery after twenty-five years of upheaval and conflict.

Metternich's views struck a sympathetic chord throughout Europe and gained for him a tremendous prestige among his contemporaries. Working in close harmony with the Prussian government he was able to put his ideas into practise throughout Germany and Italy (Carlsbad Decrees of 1819). But he was eager to extend what has been called his "system" to all of Europe. He therefore made himself the champion of the idea of European solidarity, of general control by the great powers (the Pentarchy), of common resistance to a common foe. Eventually he carried even Alexander of Russia with him (Troppau Protocol of 1820). But while Metternich remained to the end of his life the exponent of stability, peace and European solidarity, the world grew away from him. Under Canning and Palmerston the concert of the powers broke up. The Greek revolution and the revolutions of 1830 were staggering blows at his prestige and influence. He remained the *rocher d'ordre* but even in Austria his system became increasingly difficult to maintain and was swept away by the Revolution of 1848.

WILLIAM L. LANGER

Consult: Aus Metternichs nachgelassenen Papieren, ed. by Richard Metternich-Winneburg and A. von Klimkowtröm, 8 vols. (Vienna 1880-84), tr. by Mrs. A. Napier and G. W. Smith as *Memoirs of Prince Metternich, 1773-1835*, 5 vols. (London 1880-82); Mazade, Charles de, *Un chancelier d'ancien régime* (Paris 1889); Lorenz, Ottokar, "Fürst Metternich" in his *Staatsmänner und Geschichtschreiber* (Berlin 1896) p. 1-94; Demelitsch, Fedor von, *Metternich und seine auswärtige Politik* (Stuttgart 1898); Molden, Ernst, *Die Orientpolitik des Fürsten Metternich 1820-1833* (Vienna 1913); Westphal, Otto, "Metternich und sein Staat" in *Oesterreichische Rundschau*, vol. xix (1923) 901-17; Groos, Karl, *Fürst Metternich, eine Studie zur Psychologie der Eitelkeit* (Stuttgart 1922); Meyer, A. O., in *Archiv für Politik und Geschichte*, vol. ii (1924) 134-66; Srbik, Heinrich von, *Metternich, der Staatsmann und der Mensch*, 2 vols. (Munich 1925); Paléologue, Maurice, *Romantisme et diplomatie, Talleyrand, Metternich, Chateaubriand* (Paris 1924), tr. by A. Chambers (London 1926); Wertheimer, Eduard von, "Gibt es einen neuen Metternich?" in *Forschungen zur brandenburgischen und preussischen Geschichte*, vol. xxxviii (1926) 339-67; Bibl, Viktor, *Metternich in neuer Beleuchtung* (Vienna 1928); Kittel, E., "Metternichs politische Grundanschauungen" in *Historische Vierteljahrschrift*, vol. xxiv (1927-29) 443-83; Woodward, Ernest L., *Three Studies in European Conservatism* (London 1929); Herman, Arthur, *Metternich* (London 1932).

MEYER, EDUARD (1855-1930), German historian. Meyer's life is unique in its simplicity and concentration on a single goal. He was born in Hamburg, where he received an excellent classi-

cal education in the Johanneum. While still at school he formed the project of writing a general history of the ancient world, which he never abandoned, organizing his life accordingly. In the University of Leipsic he studied the oriental languages exclusively and after graduation spent some years at Constantinople as tutor in an English family. He returned to Germany and taught in the universities of Leipsic, Breslau and Halle and finally went to Berlin in 1902. In 1884 he published the first volume of his most important work, *Geschichte des Altertums*, devoted to the history of the ancient Orient, and added to it in rapid succession four more volumes, which brought the narrative down to the time of Philip and Alexander. During the composition of his magnum opus and after the completion of its first five volumes he wrote numerous articles and books, in which he treated competently and with acumen various problems of ancient history: Egypt, Palestine, Babylonia, the Hittites, Greece and the Hellenistic world, Rome, early Christianity, problems of method and of economic evolution. The World War and the subsequent period of reconstruction prevented him from finishing his *Geschichte des Altertums* and from completely revising the first volumes.

Meyer's great contribution lies in the fact that he was the first to give a presentation of ancient history as a whole, as a part of *Universalgeschichte*—not as a generalization based on second-hand information, but as an original contribution built up on a solid and lasting foundation. His knowledge of oriental languages made it possible for him to analyze and to interpret the oriental sources in the same masterly way in which he interpreted the Greek and Latin. The result was a well balanced unit, the first real history of the ancient world. No phase is neglected: although political history occupies the foreground, social and economic factors, religious development, intellectual currents and artistic evolution are not neglected. In his conception of history Meyer was a rationalist and paid no attention to the irrational. His theoretical views, which were often severely criticized, are set forth in his introduction to his history and in various essays. He conceived of history as a result of interaction between free will and accident; no historical laws exist; history is individual and never repeats itself; furthermore its presentation is always subjective and therefore never final. History moves in cycles, of which ancient history forms one; modern history repeats,

mutatis mutandis, the various periods of ancient history.

M. ROSTOVITZ

Important works: *Geschichte des Altertums*, 5 vols. (Stuttgart 1884-1902; vols. i-ii, 2nd-3rd eds. 1910-31); *Geschichte des alten Aegyptens* (Berlin 1887); *Die Entstehung des Judenthums* (Halle 1896); *Die Israeliten und ihre Nachbarstämme* (Halle 1906); *Der Papyrusfund von Elephantine* (Leipsic 1912, 2nd ed. 1912); *Reich und Kultur der Chetiter, Kunst und Altertum*, vol. i (Berlin 1914); *Sumerier und Semiten in Babylonien* (Berlin 1906); *Forschungen zur alten Geschichte*, 2 vols. (Halle 1892-99); *Geschichte des Königsreichs Pontos* (Leipsic 1879); *Blüte und Niedergang des Hellenismus in Asien, Kunst und Altertum*, vol. v (Berlin 1925); *Caesars Monarchie und das Principat des Pompejus* (Stuttgart 1918, 3rd ed. 1922); *Ursprung und Anfänge des Christentums*, 3 vols. (Stuttgart 1921-23); *Kleine Schriften*, 2 vols. (Halle 1910-24; vol. i. 2nd ed. 1924).

Consult: Wilcken, U., and Jaeger, W., *Eduard Meyer zum Gedächtnis* (Stuttgart 1931); Otto, W., "Eduard Meyer und sein Werk" in *Zeitschrift der deutschen morgenländischen Gesellschaft*, vol. x (1931) 1-24; Ehrenberg, V., in *Historische Zeitschrift*, vol. cxliii (1930) 501-11.

MIASKOWSKI, AUGUST VON (1838-99), German economist, agrarian reformer and statistician. Miaskowski was born in Livonia. His family originally came from Poland and belonged to the bourgeoisie rather than to the landed aristocracy in the Livonian caste state of that period. The social milieu from which he came exerted a decisive influence upon his political views as well as upon his scientific position. After a legal education Miaskowski became an administrative official in Riga. He championed the interests of the bourgeoisie against the landed nobility, which clung tenaciously to its old privileges, and played an important role in the reform activity which aimed to complete the emancipation of the serfs in the Baltic provinces. His participation in this movement led him to concentrate his interests upon the examination and solution of the agrarian problem. During his professorship at the University of Basel he endeavored to elucidate the historical evolution of the *Allmende* system characteristic of Swiss agriculture. While teaching at the University of Breslau he wrote his comprehensive work on inheritance law and land distribution in Germany. This book, Miaskowski's masterpiece, contains also his agrarian program: he proposed to strengthen the peasant middle class, whose emancipation he had championed in Riga, by means of the elaboration and extension of the system of inheritance intended to prevent excessive subdivision of the land, whereby one of

the heirs receives the entire landed estate and compensates the remaining heirs in other forms. The same motives inspired him when he opposed in the German Agricultural Council (Deutscher Landwirtschaftsrath) the grain tariff increases, which he regarded as unduly favoring the interests of the large landowners. Miaskowski may be grouped with the realistic-historical school of economists which dominated German political economy during the last third of the nineteenth century

AUGUST SKALWEIT

Important works: *Isaak Iselin. Ein Beitrag zur Geschichte der volkswirtschaftlichen, socialen und politischen Bestrebungen der Schweiz im 18. Jahrhundert* (Basel 1875); *Die Verfassung der Land-, Alpen- und Forstwirtschaft der deutschen Schweiz in ihrer geschichtlichen Entwicklung vom XIII. Jahrhundert bis zur Gegenwart* (Basel 1878); *Die schweizerische Allmende in ihrer geschichtlichen Entwicklung vom XIII. Jahrhundert bis zur Gegenwart*, Staats- und sozialwissenschaftliche Forschungen, vol. ii, pt. iv (Leipsic 1879); *Das Erbrecht und die Grundeigentumsverteilung im Deutschen Reiche. Ein socialwirtschaftlicher Beitrag zur Kritik und Reform des deutschen Erbrechts*, Verein für Socialpolitik, Schriften, vols. xx, xxv, 2 vols. (Leipsic 1882-84); *Agrarpolitische Zeit- und Streitfragen. Vorträge, Referate und Gutachten* (Leipsic 1889); *Das Problem der Grundbesitzverteilung in geschichtlicher Entwicklung* (Leipsic 1890).

Consult: Bücher, K., "Nekrolog auf August von Miaskowski" in *K. Sächsische Akademie der Wissenschaften, Leipsic, Philologisch-historische Klasse, Berichte*, vol. lii (1900) 351-58.

MICHEL, HENRY (1857-1904), French political theorist. In addition to being a journalist Michel spent his entire life lecturing on philosophy, first in *lycées* and later in the University of Paris, where he held a chair in the history of political ideas. He was throughout his life a champion of a thoroughgoing individualism, the virtual disappearance of which from political life and thought he traced in his chief work, *L'idée de l'état*. It is this work which forms his distinctive contribution to social philosophy. In Michel's eyes the rights of the individual are anterior to those of society (which is after all but an aggregate of individuals) and are sacred against the perpetually encroaching claims of the state. With this assumption he examines the development of political ideas in France since the revolution and comes to the conclusion that true liberalism died with eighteenth century individualism. Not only are Jacobins, authoritarians and socialists ready to sacrifice the individual to an alleged collective welfare, but even so-called liberals have become oblivious of their own

fundamental principles. Whether doctrinaires like Guizot, opportunists like Thiers, democrats like de Tocqueville, scientific sociologists like Taine and Renan, economists like Bastiat and Say, none of them really believes in individual freedom; each claims it for himself but denies it to his opponents; the most ardent critic of state interference in economic or social relationships is the clamorous champion of oppressive state rights in the repression of "subversive" opinions, in the limitation of the freedom of groups and associations and in virtual autocracy in foreign policy. *La raison d'état* has killed any philosophy of natural rights.

Michel's chief concern was moral rather than strictly political—the defense of the individual conscience against all that might impinge upon its freedom of action. In this championship of the sacred rights of conscience Michel was largely influenced by the philosophy of Renouvier, who was to him the only logical liberal that France had produced in the nineteenth century—logical, that is, in his defense both of individual moral freedom and of the individual's right to protection by society against all obstacles to this free development. Of these obstacles pauperism was the chief, and Michel followed his master in placing an "advanced" program of social legislation in the forefront of his liberalism, thus doing more than anyone in his day, says Bouglé, "to bring together individualistic and socialistic tendencies."

ROGER SOLTAU

Important works: "La philosophie politique de Spencer" in *Académie des Sciences Morales et Politiques, Séances et travaux . . . Compte rendu*, vol. cxxxviii (1892) 215–54; *L'idée de l'état, essai critique sur l'histoire des théories sociales et politiques en France depuis la Révolution* (Paris 1895, 3rd ed. 1898); *La doctrine politique de la démocratie* (Paris 1901); "Herbert Spencer et Charles Renouvier" in *Année psychologique*, vol. x (1904) 142–60; *La loi Falloux* (posthumous essay, completed and ed. by S. Charléty (Paris 1906).

Consult: Bouglé, C., "Une doctrine idéaliste de la démocratie: l'œuvre d'Henry Michel" in *Revue politique et parlementaire*, vol. xliii (1905) 562–76; Ruggiero, Guido de, *Storia del liberalismo europeo* (Bari 1925), tr. by Henry Collingwood (London 1927); Soltau, R. H., *French Political Thought in the Nineteenth Century* (London 1931).

MICHEL, LOUISE (c. 1833–1905), French revolutionist. Louise Michel played an extraordinary role in the development of the revolutionary movement in France, not as theoretician or organizer but as agitator. Her ability to inspire the masses with her own glowing enthusiasm

and certainty secured her an immense popularity among the French workers. The paradox of her humanitarianism and the savagery of her attacks upon the ruling classes is perhaps explained by the influence on her character of the eighteenth century liberalism of her grandfather and the profound and permanent sense of pity aroused in her by the poverty of the peasants among whom she spent her childhood.

Louise Michel's active revolutionary career began during the siege of Paris in 1870. It was preceded by her refusal to take the oath of allegiance to Napoleon III, which resulted in her being denied a state post as teacher. During the Commune she organized clubs, nursing corps and the Union des Femmes and finally fought in the ranks of the National Guard on the barricades in the last days of May, 1871. After eight years of exile in New Caledonia she returned to Paris and resumed her agitation with undiminished fervor. She was active in Paris, London and Belgium, organizing women's groups, raising relief funds, establishing refuges for the politically persecuted and striving always to arouse the masses to revolutionary activity.

The political philosophy of Louise Michel was a blend of Marxism and anarchism. She believed in the inevitability of social revolution, the reality of the class struggle and the necessity of revolutionary action by the masses. The experience of the Commune led her to conclude that the revolution must first and foremost abolish the state. This and antiparlamentarism were the only anarchist doctrines she accepted. She had the greatest contempt for the individualistic elements in anarchist philosophy and had no respect for utopian colonization schemes or the problems of free love. But it was her day to day work as much as her theory that aroused the devotion of the masses, whose misery and poverty constituted her special problem. She participated in the actual struggles of the workers. Years spent in prison, poverty and deprivation could not dampen her ardor. Her supreme unselfishness won for her the respect even of the government which persecuted her.

Louise Michel was not a great leader. She left no theoretical heritage or definite program, only the example of her life—complete and fearless devotion to an ideal.

SARA SMALL

Important works: *Mémoires* (Paris 1886); *Légendes et chants de gestes canaques* (Paris 1885); *La Commune* (Paris 1898, 2nd ed. 1898).

Consult: Boyer, Irma, "La vierge rouge," *Louise Michel*

(Paris 1927); Lissagaray, P. O., *Histoire de la Commune de 1871* (Brussels 1876), tr. by E. M. Aveling (London 1886) p. 435-36; Malon, Benoît, *La troisième défaite du prolétariat français* (Neuchâtel 1871) p. 273-81; Rochefort-Luçay, V. H. de, *Les aventures de ma vie*, 5 vols. (Paris 1896), English translation by the author and E. W. Smith, 2 vols. (London 1896) vol. ii, p. 48, 74-76; Stead, W. T., "Louise Michel, Priestess of Pity and Vengeance" in *Review of Reviews*, vol. vi (1892) 155-67.

MICHELET, JULES (1798-1874), French historian. After a long childhood struggle against poverty and misery Michelet in 1822 became a professor at the Collège Sainte-Barbe in Paris. Five years later, following the publication of his first work, *Précis de l'histoire moderne* (1827; tr. as *Modern History*, New York 1855), he was appointed to the faculty of the École Normale, where during the next decade he exerted a deep influence on a small group of select students. After 1831 he served also as director of the historical section of the Archives Nationales and was thus able to familiarize himself at first hand with a vast collection of historical documents; from 1833 to 1836 he occasionally conducted Guizot's courses at the Sorbonne. His appointment in 1838 to the chair of history and morals at the Collège de France extended still further the scope of his influence, and in the closing days of the July Monarchy his lectures were a powerful factor in stimulating enthusiasm for the insurgent democratic movement which culminated in the Revolution of 1848. With the overthrow of the Second Republic in 1852 he was dismissed both from the college and from his post at the archives, remaining until his death an unrepentant democrat.

Throughout his life Michelet was unwavering in his loyalty and devotion to the masses from which he had sprung. Emotional and temperamental, with none of the staid, doctrinaire quality of a Guizot, he dedicated the exalted eloquence and richness of his style to resurrecting the unsung millions whose labors and heroisms constituted in his eyes the true epic of France. Deeply versed in Herder and Grimm as well as in Vico, whose *Principi di una scienza nuova* he had translated and helped to popularize in France, he believed above all in the creative power of the collective people and in the myths and legends which gave expression to their hopes and aspirations. His admiration for the dynamic role of the individual leader tended, especially in such works as the *Origines du droit français* (1837), *Le peuple* (1846; tr. by C. Cocks, 3rd ed. London 1846), *La sorcière* (1862; tr. by L. J.

Trotter, London 1863) and *Le bible de l'humanité* (1864; tr. by V. Calfa, New York 1877), to be overshadowed by his sense of the symbolic character of leadership, which he conceived as merely embodying the mass ideals of the people. Even a cataclysmic historical movement like the French Revolution derived its primary significance in his eyes from the fact that it symbolized the creative genius of the masses of obscure Frenchmen, in whose struggles was mirrored the very spirit of France. In the seven volumes of his monumental survey of French history which deal with the French Revolution, and which constitute Michelet's most significant historical work, the note of intense nationalism characterizing all of his writing is tinged with a partisan bias that reflects many of the prejudices engendered during the period of the 1848 Revolution.

The appeal of Michelet's lyrical style and his impetuous glorification of France have continued to inspire in countless of his fellow countrymen a love of the national past. Later generations of French historical scholars, conscious of this enduring appeal, have been on the whole tolerant of his lapses from orthodox historiography and have been inclined to emphasize instead his positive contributions to historical studies, such as his use of documents, his service in counteracting Thierry's rigid thesis of racial determinism, his recognition of the geographical factor in history and his unrivaled power of revitalizing the past. His reputation outside France, being confined almost entirely to academic circles, has tended to suffer with the general progress of research technique and facilities. But despite widespread skepticism regarding the conclusions of the romantic historians in general and the not infrequent tendency to dismiss Michelet as an erratic, often superficial and prejudiced, enthusiast large sections of his work are still prized even by exacting scholars as preeminent examples of the art of historical writing.

LUCIEN FEBVRE

Works: *Histoire de France*, 17 vols. (Paris 1833-67), vols. i-ii tr. by W. K. Kelly (London 1844-46); *Histoire de la Révolution française*, 7 vols. (Paris 1847-53); *Histoire du XIX^e siècle*, 3 vols. (Paris 1872-75); *Oeuvres complètes*, 40 vols. (definitive ed. Paris 1893-98).

Consult: Monod, G. J. J., *La vie et la pensée de Jules Michelet*, 2 vols. (Paris 1923), and *Jules Michelet, Étude sur sa vie et ses oeuvres, avec des fragments inédits* (Paris 1905); Lanson, G., "Le tableau de la France de Michelet, notes sur le texte de 1833" in

Wilmotte, M., *Mélanges de philologie romane et d'histoire littéraire*, 2 vols. (Paris 1910) vol. i, p. 267-99; Rudler, G., *Michelet historien de Jeanne d'Arc*, 2 vols. (Paris 1925-26); Refort, L., *L'art de Michelet dans son oeuvre historique* (Paris 1923); Chabaud, A., *Jules Michelet* (Paris 1929), with bibliography p. 57-84; Gooch, G. P., *History and Historians in the Nineteenth Century* (2nd ed. London 1913) p. 175-85; Fueter, E., *Geschichte der neueren Historiographie*, Handbuch der mittelalterlichen und neueren Geschichte, vol. i (2nd ed. Munich 1925) p. 452-55.

MICKIEWICZ, ADAM (1798-1855), Polish national poet. Mickiewicz had completed his studies at the University of Vilna when he was exiled to the interior of Russia because of his participation in student patriotic activities. He lived in Odessa, Moscow and St. Petersburg until 1829; in that year he went abroad, traveling in Germany and Italy. After the suppression of the insurrection of 1831 he joined the Polish political émigrés in Paris. For a brief period he lectured on Latin literature at the Lausanne Academy, and upon his return to Paris became professor of Slavic literature at the Collège de France. He came into close contact with Lamennais, Michelet and other French thinkers, who influenced his thought and whom he in turn influenced. It was in Paris also that he came under the spell of Towiański, the Polish mystic who believed himself chosen by God to restore the principles of true Christianity. His temporary association with Towiański not only involved Mickiewicz in difficulties with the Catholic church but was largely responsible for his dismissal from his academic post in 1844. During the Austro-Italian war of 1848 he organized a Polish legion. Subsequently he returned to Paris as the editor of the *Tribune des peuples*, a publication devoted to a defense of the rights of oppressed nations, and advocating radical social reform. In 1855 during the Crimean War he set out to join the Polish formations organized in Turkey to fight against Russia, but died in Constantinople before he could take an active part in the conflict.

The span of Mickiewicz' activity coincided with that period when the current of rationalism, which had led to a revival of Polish literature in the second half of the eighteenth century, had become void of both ideas and talent. As the creator of Polish romanticism he broke with the dogmas of classical aesthetics and in his works became the champion of individualism, of the creative freedom of genius, of reverence for folklore and for the Middle Ages. With the publication of *Konrad Wallenrod* (St. Petersburg

1828; tr. by G. R. Noyes, D. P. Radin and others in *Konrad Wallenrod and Other Writings*, Berkeley 1925) Mickiewicz achieved lasting fame as Poland's greatest national poet; this poetic tale, which deals with the struggle of the Lithuanians with the Teutonic Knights in the fourteenth century, presents in its hero the most sublime example of love for one's country and its tragic conflicts with the demands of heart and conscience. Shaken by the national calamity—the failure of the insurrection of 1831—Mickiewicz wrote his two finest poetic works: *Dziadów, część trzecia* (Dresden 1832; tr. by D. P. Radin and ed. by G. R. Noyes as *Forefathers' Eve, Part III*, London 1925) and *Pan Tadeusz* (2 vols., Paris 1834; tr. by G. R. Noyes as *Master Thaddeus*, 1 vol., London 1917). In the former he portrayed the persecution by the Russian government of the young generation struggling for the freedom of Poland and prophesied the future liberation and greatness of his fatherland; the hero, Konrad, acutely aware of the sufferings of his people and overcome by the power of Evil Triumphant, seeks a means of rescue at first in a revolt against God—this great improvised scene constitutes the supreme flowering of Polish poetry—and later through reconciliation and Christian humility. *Pan Tadeusz* describes at length the life and customs of the minor Polish nobility in Lithuania against the background of the opening events of the great war of 1812; written with noble simplicity of style, combining elements of lofty tragedy and subtle humor and portraying the moment of transition between two epochs, it has become the national epic of old Poland.

But Mickiewicz was more than a poet. He was the personification of the Polish national spirit inflexible in captivity, the champion of the liberty of all oppressed nations. In his *Księgi narodu polskiego i pielgrzymstwa polskiego* (Paris 1832; tr. as "Book of the Polish Nation and Polish Pilgrims" in *Konrad Wallenrod and Other Writings*, Berkeley 1925) he developed the idea of Polish messianism; God has entrusted to the Polish people the task of initiating a new era of liberty and justice. The redemption of man from spiritual degradation by the act of Christ is to be paralleled by the liberation of oppressed peoples by the self-sacrificing struggle of the Poles. Mickiewicz saw in the sufferings of the Polish people the divinely ordained process of spiritual purification preparatory to the realization of its mission, and looked upon the dispersion of Poland's bravest sons over the civilized

world as a part of the divine plan of spreading the gospel of political and social liberation. This spiritual manifesto, which served as a source of consolation and inspiration to the oppressed Polish people, won the sympathies of contemporary radical and religious thought. It was received with particular enthusiasm in France and contributed greatly to the strengthening of the traditional cultural friendship between the two nations. As a Slavophile, Mickiewicz sympathized with the Russian people, but he believed that czarist absolutism constituted an obstacle to the union of the Slavic nations.

STANISŁAW PIGOŃ

Works: Pisma Adama Mickiewicza (Writings), ed. by J. Kallenbach, 7 vols. (Brody 1911-13); *L'homme eternal: pages choisies en prose* (Paris 1929). For a complete list of his works see Korbut, Gabriel, *Literatura polska od początków do wojny światowej* (Polish literature from its beginnings up to the World War), 4 vols. (Warsaw 1929-31) vol. iii, p. 14-37.

Consult: Gardner, Monica M., Adam Mickiewicz, the National Poet of Poland (London 1911); Dyboski, Roman, *Periods of Polish Literary History* (London 1923) p. 85-100; Krzyżanowski, Julian, *Polish Romantic Literature* (London 1930) p. 41-105; Articles by Józef Kallenbach and others in *Monde Slave*, n.s., vol. vi (1929) 321-496; Kallenbach, J., *Adam Mickiewicz* (in Polish), 2 vols. (4th ed. Lwów 1926); Szponański, S., *Adam Mickiewicz i jego epoka* (Mickiewicz and his epoch), 3 vols. (Warsaw 1921-22), and *Adam Mickiewicz et le romantisme* (Paris 1923); Pigoń, Stanisław, *Z epoki Mickiewicza* (Mickiewicz' epoch) (Lwów 1922); Chmielowski, Piotr, *Filozoficzne poglądy Mickiewicza* (Philosophical views) (Warsaw 1899). For an extensive bibliography of works about Mickiewicz see Stolarzewicz, Ludwik, *Bibliografia mickiewiczowska* (Vilna 1924).

MIDDLE CLASS. The middle class, whether viewed historically or as a present day phenomenon, cannot be considered a homogeneous social layer. The break up of the feudal economy, characterized by a growing division of labor as between the producer of raw materials and the small manufacturer and by the concentration of commercial and industrial enterprise in the towns, brought into existence a somewhat cohesive intermediate social and functional group (*Mittelstand*). This initial cohesiveness was intensified by the growth of a civic spirit, which gradually transformed the inhabitants of the towns into self-conscious burghers more or less united in their determination to secure legal privileges and rights and to bring to an end, forcibly if necessary, the restrictions imposed by the feudal landowners. The transition from the mediaeval to the modern economy, which took place first in Italy and later throughout the rest

of Europe, was the work in large part of this commercial and industrial *bourgeoisie* of the towns, which continued throughout the period of early capitalism to occupy an intermediate status between the older privileged estates on the one hand and on the other the serfs and peasants riveted to the land. The gradual transformation of this early "intermediate estate" (*Mittelstand*) into a "middle class," comprising a mixture of more or less heterogeneous and often conflicting economic and social elements, is a reflection not only of the decline of the older privileged estates but also of the tendency toward increasing complexity of social structure manifested in the successive stages of the unfolding of the capitalistic system. The transition from mercantilism to industrial liberalism to monopolistic neomercantilism is accompanied at each step by new alignments and new tensions within the intermediate economic groups. At the same time the gradual displacement of the concept of status by the concept of class and the schematic formulations of the proletarian ideologists have thrown emphasis on new cleavages inherent in the modes of production characterizing fully developed capitalism. The modern bourgeoisie, although stemming ultimately from the burghers of the late mediaeval towns and although constituting during most of the intervening period a middle class in the literal sense of the term, is interpreted in the light of Marxian socialist theory as a privileged upper minority feeding on surplus value and state favoritism and inexorably driving its victims into the ranks of the proletariat. This dualistic interpretation when set against the realities of contemporary economic life would seem to minimize the multiplicity of intermediate groupings which lie between the trust bourgeoisie and the proletariat, and which may be grouped together with some show of precision as the "middle class." Conceived thus the middle class includes within its ranks the middling size entrepreneur in industry and trade; the simple producer of goods, such as the artisan and farmer; the small shopkeeper and tradesman; and the official and salaried employee.

The difficulty of delimiting the middle class with any pretension to final precision is illustrated particularly in the case of the small industrial and commercial entrepreneur, whose business is conducted on a limited scale and as a rule under his more or less immediate supervision. For like the bourgeois monopolist such an entrepreneur conceives value in terms of

market exchange, is impelled exclusively by the profit motive and is an employer of labor. Moreover it should be emphasized that the attempt to distinguish between the upper and middle class entrepreneur by recourse to numerical criteria, as, for example, the number of workers employed, is an unrealistic if inescapable analytical device.

In the transition from the monopolistic and absolutistic regime of mercantilism to the period of *laissez faire* enterprise ushered in by the American and French revolutions, the small scale entrepreneur played a decisive role. The revolutionary successes of the late eighteenth and mid-nineteenth centuries signified not only the destruction of the *ancien régime*, along with its various types of feudal, clerical and monarchical restrictions, but also a reorientation of the position of the middle class itself. For the upper ranks of the bourgeoisie—merchant proprietors, financiers, slave traders, colonial entrepreneurs, tax farmers, munition makers and manufacturers of luxuries—which during the early stage of commercial capitalism had acquired privileges and wealth under a mercantilistic regime, were likewise set upon by the champions of the hitherto neglected industrialist proper. The ideology of the *philosophes* and the enthusiastic libertarianism of the *beaux esprits* thus acquired a weighty economic ballast in the realistic demands of the industrial entrepreneurs. Unideological from the outset and rejecting theoretical abstractions, the manufacturers and factory owners with a close eye to their workaday interests mapped out a clear cut if not farsighted economic, political and social scheme of values. In their desire for freedom of trade in its broadest sense they battered down not only the relics of the mediaeval guild restrictions but also the privileges, monopolies, subventions, price regulations and other restrictions on enterprise bequeathed by the autocratic state. The program of free trade called likewise for the abolition of feudal conventions of land tenure, which by artificially restricting the consumption capacity of the most numerous element in the population, prevented any real expansion of the market for industrial products. Moreover the policy of binding the agrarian classes to the soil seriously restricted the supply of proletarian labor and to that extent retarded industrialization.

The financial program of the radical entrepreneur called for economical and commercially sound legislation and administration and more particularly the abolition of prevailing abuses in

public finance, such as the discouragement of capital accumulation by extortionate taxation, unrestrained loan economy, the wasting of state revenue on court luxury and the upkeep, whether by sinecures or outright contributions, of a bankrupt nobility. The primary prerequisite of such a financial program was a national constitution which by insuring the ascendancy of the propertied and cultivated middle class in the management of public affairs would prevent discrimination from above and at the same time guard against the instability of the masses from below. Satisfied with a limited franchise and a regulated monarchy, the typical entrepreneur was concerned primarily with limiting the economic role of the state to the protection of life and property.

This jealous attitude toward the state was first clearly manifested in the struggles between the different economic and social groups engaged in the revolutionary movement in France. To the manufacturer, the merchant and the tradesman, individualistic and anti-authoritarian to the core, the mass minded Jacobin dictator with his omnipotent state, his Draconian taxes and forced loans, his enthusiasm for the subjection of the individual to the *volonté générale*, was a false prophet to be silenced as quickly as possible. The deeply rooted anti-authoritarianism of the middle class entrepreneur is instanced most clearly in mid-nineteenth century England. In the eyes of the English industrialist and trader the state, which since the Reform Act of 1832 had become to a certain extent his agent, could offer nothing better than stability and free opportunity for industrial expansion; more positive economic participation was not only superfluous but detrimental. Unswerving adherence to the principles of profit and free competition is mirrored in the statistics of steadily rising production, improvements in communication and expanding commerce. But the significance of these accomplishments did not remain limited to the economic sphere. Under the domination of the middle class the entire range of social and intellectual life was brought into the orbit of the capitalistic price system; science, literature, art, were forced to justify themselves in terms of prevailing economic values and principles.

Although the middle class entrepreneur had succeeded in overturning absolutism, clericalism and feudalism; although, viewed in a broader historical perspective, he had brought to a successful termination the earlier struggle of the burghers of the late mediaeval towns against the

feudal lords; and although he had created throughout Europe and in outlying colonial areas a world in his own image, he soon found his position undermined and was forced to witness the decay of the economic and social principles which he had propagated and institutionalized. Proudhon's paradox, "Competition kills competition," might well serve as an epitaph of middle class liberal capitalism. The cut-throat struggle of medium sized and small scale entrepreneurs resulted in wholesale elimination of the less fit and thus prepared the way for monopolization, the dominant characteristic of latter day capitalism. This tendency first took root in the branches of industry in which a really free competition had never existed or had constituted a relatively short phase of development. But the monopolization of the basic industries, of means of communication, of banks and the like resulted in a wave of attempts at concentration and monopolization which engulfed the entire national economy, even the manufacturers of finished products. The extraordinary demand for capital resulting from the variety of mammoth enterprises drew together the banker and the industrial capitalist and ushered in that economic system which since Rudolf Hilferding's classical discussion has been alluded to as finance capitalism (*Finanzkapital*).

During the same period the familiar process of amalgamation between the landed aristocracy and the more powerful industrial and financial magnates was intensified. The development of more absorbent urban markets for raw materials and provisions, the building up of the trades auxiliary to agriculture, which were from the first capitalistically managed, the possibility of investing the income from land in industrial and commercial securities, accelerated the transformation of the feudal aristocracy into agrarian capitalists. On the other hand, the plutocracy invested itself more and more diligently with the trappings of aristocracy, through marriage, social contacts, acquisition of landed estates and cultural refinements in general. The foundations for the alliance between what Brinkmann terms the "primary" and "secondary" aristocracy are ultimately laid in foreign and economic policy; for the rise of monopoly capitalism signifies even in these spheres a complete departure from liberal capitalism. The policy of free trade or the protection of infant industries was replaced by an aggressive policy of prohibitive tariffs; antimilitarism by the race for armaments; the renunciation of colonial expansion by armed

struggle for the control of raw materials and above all of spheres for the investment of capital. But this very overthrow of liberal middle class anti-authoritarianism by the trust bourgeoisie minority, this neomercantilist establishment of the trust directed state in the competitive struggle for a place in the sun, opened to members of the nobility as officers, diplomats and administrative officials a variety of well paid, eminently respectable careers.

To the up to date industrial magnate the enthusiasm of the liberal middle class progressive for free play of economic powers, for manly pride as above princely thrones and the like began to seem at best unrealistic. For he had come to understand that as a whole this ideology from the heroic age of the bourgeois middle class was no longer applicable to the relationships of dependence inherent in monopoly capitalism. At times he even finds it difficult to disguise his sympathies for a hierarchical ordering: for a new corporative state, in which the industrial bourgeoisie and their agrarian and financial capitalistic adherents would take over the role of the nobility and the proletariat that of the peasantry.

The transformation of the liberal capitalism of free competition into trust ridden imperialism and the more profound dislocations involved therein placed the small and middling entrepreneur on the defensive, just as the business houses, the manufactories and factories had done in the case of the master craftsman at an earlier period. To their economic dispossession the artisans had replied with the demand for the reestablishment of guild restrictions; to the threats of the trust bourgeoisie the small capitalists responded with the mellow rhetoric of liberalism. Most interesting in this connection is the American antitrust legislation. The United States began its political career as a democracy of small farmers and traders. Its economic development, omitting the earlier stages characterizing European development, began directly with competitive capitalism. On this account the process of monopolization, which set in at an early date and with great force, could not build upon native prototypes of early capitalistic provenance and encountered the strong opposition of public opinion, which had erected free competition into an economic dogma. Because the structure of American society thus offers a unique chance for an attack by the middle class against monopoly capital, an unusual significance may be attached to the practical failure

of the antitrust legislation. This failure is to be accounted for not only by the obvious legal difficulties of trust supervision or by the impossibility of checking an economic development once it has set in but, more important, by the impracticability of divorcing a recognized principle from the consequences to which it necessarily leads. On this account the small entrepreneurs, who while they desired free competition did not desire the competition to turn into monopolistic forms, fought on the whole a hopeless battle.

The growing dependence of the middle class entrepreneur on the large concerns, the banks and the basic industries has tended to sap his opposition to the trust bourgeoisie. Since the monopolization process has encroached upon the manufacture of finished products, the hope of the smaller industrial and commercial capitalist has come to lie less in the struggle against monopoly than in the attempt to transform himself into a monopolist. The relationship between the capitalistic middle class elements and the trust bourgeoisie is complicated by the fact that the upper minority, thanks to its wealth, the closeness of its organization, its control over the institutions with whose help public opinion is formed, functions at least nominally as the champion of the entire capitalist class against the working class and the labor movement.

The paradoxical position of the smaller entrepreneur in modern society with his vacillation between opposition and surrender to the trust bourgeoisie is clearly mirrored in his social ideals, pieced together with pious hands from the remnants of faded bourgeois liberalism. It would be incorrect, however, to consider the trust bourgeoisie as imperialistic, neofeudalistic and sympathetic with the corporative state, and the capitalistic middle class as "liberal." For the trust bourgeoisie also can occasionally become enthusiastic on behalf of the free play of economic powers and the non-participation of the state in economic life; namely, when the workers with the help of their political and economic organizations desire to improve their conditions of work or to put through social protective legislation. Similarly the struggle against genuine collectivist tendencies, such as those aiming at the socialization of means of production, is enthusiastically supported by the trust bourgeoisie and its agents by recourse to old liberal arguments, in which a free competitive capitalism, in reality no longer in existence, is contrasted with a bureaucratic, torpid, so-called socialistic

national economy—of course to the disadvantage of the latter. Thus from the point of view of the salvaging of liberal ideology there exists no essential difference but merely one of degree between monopoly capital and its hangers on among the smaller entrepreneurs. While the "liberalism" of the trust bourgeoisie is directed invariably downward against the political and social demands of the laboring classes, the capitalistic middle class liberalism assumes at times the form of a gentle opposition directed upward against monopoly capital.

On the other hand, sympathy with the neofeudalistic program of a corporative state is in certain countries, notably Germany, widespread throughout the small entrepreneur group. While the support of this program on the part of the monopolist has as its intention the unequivocal avowal of a hierarchical order, which although it is an unmistakable symptom of capitalism must be disguised out of deference to democratic pretensions, the enthusiasm of the capitalistic middle class for the corporative state stems from the hope of occupying in such an order an assured middle position—assured on the one hand against oppression by the large concerns and on the other against the claims of the working classes.

With these middle class aspirations the smaller industrial and commercial capitalist approaches the second large section constituting the middle class, the artisans, the small shopkeepers and tradesmen, the peasants and the "petty bourgeoisie" in general. The present day attitude of the artisan is determined to a large extent by his historical background. As a group the artisans have consistently held fast to their pre-capitalistic guild tradition even in the heyday of competitive capitalism, when their position was aggressively reactionary. In contrast with the modern capitalist the genuine artisan of any period is interested in use value rather than exchange value and is motivated less by the profit incentive than by an impulse to satisfy consumption needs. Through the sale of the products made in his workshop he seeks to earn as much as is necessary to maintain an existence appropriate to his status. A skilled technician rather than a trader, he has mastery over a specific production process thanks to his possession of the guild secret. In the mediaeval economy the assistants of the master craftsman, the apprentices and journeymen employed by him, differed from him in age and experience but not in social position. At a comparatively

early stage of capitalism, however, the patriarchal organization of masters, journeymen and apprentices was replaced by the system of domestic manufacture, under which the entrepreneur is no longer the actual producer and the actual producer no longer in control. In the transition from the small domestic factory to the large scale mechanized plant the independent status of the handicrafts was still further threatened.

Against this increasingly serious threat the artisan raised the demand for the reestablishment of the guild constitution. In this he was supported by monarchical, noble and clerical groups, who rallied around the banner of counter-revolution and restoration and thus sought political alliances with the artisans threatened by liberalism. These efforts were not entirely fruitless; they were crystallized in the German and Austrian *Mittelstand* legislation aiming at the protection of the lower middle class engaged in the smaller trades and handicrafts. In the Anglo-Saxon countries, much more deeply influenced by liberalism, analogous legislation was entirely lacking; in England virtual free trade had existed since the Revolution of 1688, while the United States never knew a handicraft system in the sense of the mediaeval European trade organization.

The *Mittelstand* legislation of the late nineteenth century, seeking to promote cooperative self-help in the various fields of economic activity, preserved the handicrafts and small trades from total submergence. While it is true that the development of monopoly capitalism tended to stifle handicraft along with other individualistic enterprises, it nevertheless opened a few doors here and there and gave it a new lease on life. The artisan as well as the small trader has come to be at the beck and call of the large capitalist, disposing of, installing, distributing and repairing the goods produced in the great factory industries. In spite of the rapid disappearance of his independent economic functions and responsibilities the lower middle class tradesman and shopkeeper clings all the more ardently to the semblance of independence. On occasion he may indulge in heated outbursts against the financier and monopolist, but the sting is drawn by his deep seated fear of radical proletarianism. With the dwindling of his possessions the horror of expropriation increases. His plight is made worse by his inability to resist the wage policy demands of organized labor, to shift the cost of wage increases on to

prices or to replace the increasingly expensive human labor power by greater use of machines. Moreover the comparison of his standard of life with that of the skilled, relatively well paid, unionized worker protected by social policy adds to his general feeling of resentment, which usually winds up by regarding the monopolist as the lesser of two evils. Thus the powerful capitalist can count on a fairly strong numerical following and feels safer in pushing ahead with his program of tacit expropriation by means of taxes, customs duties, interest, monopoly prices, while giving eloquent assurance of his assistance in the event of threatened expropriation by radical violence.

As members of the old middle class it is customary to include, along with the urban shopkeepers and tradesmen and artisans, the peasants. This is correct in that both peasants and artisans were constituent parts of a precapitalistic economy; but it is incorrect in that in countries with the feudal system the peasants did not form a part of the middle class but the lowest stratum, the base of the social pyramid. The same process of bourgeois emancipation which lowered the level of existence of the simple producers of goods in the cities raised that of the rural producers. In no country in which the peasants were able to emancipate themselves in the train of the urban bourgeoisie were they repressed during the course of the nineteenth century as was handicraft by the competition of the factory. Where the small agricultural producers were to a certain extent deprived of their land, as in England at the time of the wars with revolutionary and Napoleonic France or in Prussia in connection with the liberation of the peasants, this was the result not of the economic superiority of large scale industry but of definite political events.

The coincidence of bourgeois revolution and violent liberation of the peasants gave an enormous impetus to the French revolutionary movement and at the same time a great stability to the social order which followed the revolution. The fact that France, which experienced four revolutions in a century, is today the outstanding example of middle class conservatism is attributable in no small part to the enormous proportion of middle class rural elements. When in Germany in the last third of the nineteenth century the advance of large estates at the expense of small holdings came to a standstill and the specialization of production set in between large scale and small scale enterprise, the oppo-

sition of *Junker* and peasants, proverbial in the precapitalistic era, lost the last remnant of its actuality. The transformation of Germany from an agrarian exporting into an importing country led to the rise of an agrarian protective tariff policy uniting *Junker* and farmers. In organizations like the League of Agriculturists (*Bund der Landwirte*), founded in 1894, the peasants subordinated themselves to the leadership of the politically influential, landed aristocracy. The alliance between "primary" and "secondary" aristocracy was thus cemented and increased, so that, at least until the increasingly severe dislocations of the present crisis began to make themselves felt in rural areas, the agrarian capitalists added the peasants to the political following of the trust bourgeoisie.

The third large group to be considered as an element in the make up of the middle class is composed of bureaucratic officials and private employees working on a salary—the group known in Germany as the *neuer Mittelstand*. Although in a strictly economic sense both officials and salaried employees are essentially proletarians inasmuch as they are dependent upon the sale of their labor power, the realities involved in the relationship invalidate such an abstraction. The relationship between the public official and the state is first of all built on the premise of a higher loyalty; moreover the interminability of his post, the right to a pension and the adequacy of his salary tend to identify him much more with the professional groups. The activities of the official—except in the case of industries run by state capital—produce neither value nor surplus value; moreover both as a functionary in an elaborate bureaucratic system and as a recipient of derived income he is out of touch with the everyday realities and tensions of social conflict. For this reason he is disposed to gloss over the realistic economic implications of the class struggle with vague ethical and emotional sentiments and therefore to accept at face value the assurances of the trust bourgeoisie that the class struggle is a figment of distorted imaginations. The promonopoly attitudes thus generated among the ranks of state officials are of course strengthened by the ordinary relationships involved in plutocratic pressure on state government.

The average commercial or technical employee differs from the real proletarian not only as regards his social background, which is usually lower middle class, but also by his educational training, which has sometimes extended

even to a university. Another differentiation is to be found in the function which he performs in the production process. The great increase in the number of salaried employees under a system of large scale industry is attributable in large part to the fact that in the course of capitalist evolution many responsibilities borne by the individual entrepreneur were delegated to hired assistants. Under the early system of commercial capitalism the salaried employee stood in a confidential relation to his employer and tended to consider his work merely as an avenue to an independent career. But even with the closing of this avenue the salaried employee continued to be distinguished from the proletarian by the form of his contract of work—a monthly salary instead of hour or job rates—by the relative security of his employment and by the expectation of ample care for his old age. Accordingly the older German employee movement (*Angestelltenbewegung*) explicitly emphasized the distance between the employee and the proletarian and his identity of interests with the entrepreneur. A by-product of capitalism, the salaried employee is more modern in outlook than the artisans or farmers, who are burdened with the vestiges of the precapitalistic era. But the group as a whole is little swayed by impulsive social ideals, being much more intrigued by the magnificent pageant of imperialism. The phenomenal development of consumption markets at home and abroad, the resulting expansion of production and proliferation of distributive agencies, have lured the employee with the prospect of continued advancement in his particular line. Moreover in the emotionally tinged rhetoric of national defense and colonial expansion as well as in the anti-equalitarian premises of aristocratic and Fascist social theory he finds a vicarious emotional outlet.

The world wide economic crisis has deeply involved the "new middle class" in the general suffering. The catastrophic decline of national income and the inevitable paring of expenses have resulted in frequent cuts in salary, irregular payments, the barring of promotions, the cutting down of staffs, premature pensions and compulsory retirements. Moreover the transformation of the economic into a political crisis further affects the former security of the professional official class through the possibility of dismissal on political grounds.

Conditions are no more favorable for the salaried employee. Even in the period before the crisis the spread of bureaucratic corporations

on the one hand and the rapid growth in the number of salaried employees on the other rendered obsolete the idea of a personal confidential relationship between employee and employer. At the same time it became evident that the group of salaried employees was no longer safe from the threat of technological unemployment. The reserve supply of salaried employees, which was coming into existence even before the crisis, has assumed staggering proportions. In Germany there are at present about 600,000 salaried employees out of work; that is, as many as there were unemployed workers in the most adverse pre-war years. But this large army of reserves signifies an additional source of further unemployment. For the entrepreneur no longer keeps a string on his employees as he formerly did but merely unloads them with no fear that thereby the routine of business in the future period of revival will be injured; the reserve army contains employees of every category and every quality.

The existence and growth of the reserve army is an obvious strain on those still employed. In Germany there is being waged at the present time a struggle between employers' and employees' organizations over the adoption of the so-called short labor clause in wage contracts. If the employees are forced to give in, one of the last distinctions between the salaried employee and the proletarian will have disappeared. However much it may clash with his own picture of himself, the employee with a short labor contract, who no longer receives a definite salary for a definite time but is paid according to the actual number of working hours, is on the whole as much a waged worker as the proletarian proper.

On the outskirts of the new middle class are to be found the members of the so-called free professions. This group is also strongly differentiated within itself. In its higher levels, composed of prosperous doctors and lawyers and popular artists, it tends by reason of its financial and social prestige to identify itself with the upper strata of society. The role of the successful artist under the present economic and social system is epitomized in the motion picture star. Like other successful artists he or more frequently she dramatizes for the popular imagination the alluring myth of the progress from rags to riches. Carried away by the romance of the star's own meteoric career no less than by the unflinching good fortunes of the shadows delineated, millions of "fans" find escape from the

realities of their own existence and from the foreboding prospects of struggling in the company of their equals for the reformation of society.

Somewhere below this upper crust of professionals loom the doctors without patients, the lawyers without clients and the writers without readers. Even before the World War in the countries in which the educational system was still undemocratic there existed a group known somewhat vaguely as the "intellectual proletariat." An intellectual proletarian may be defined as the recipient of higher educational training who in his later life finds no opening in which to carry on the kind of practice for which he is trained. The apparent advantages of a self-sufficient professional career over a restricting office job have sent an ever increasing number of graduates from the higher centers of learning into the professions. The increased enrolment in the universities and professional schools, accompanied by a sharp drop in the demand for the services of academic graduates, has materially augmented the ranks of lawyers and doctors scraping along on scanty incomes. The gulf between youthful expectations and the disheartening realities of later life has tended to produce in the case of many professional men an intellectual and emotional lesion, in which the natural sense of frustration and rebellion clashes with the remnants of pretensions and ideals implanted in the impressionable years of academic training. The consciousness of frustration and the general sense of insecurity tend to eventuate at the best in an attitude of intellectual skepticism and relativism and oftentimes in emotional tensions and complexes. While the dispirited lawyer or journalist or artist is seldom averse to airing his impatience with the common run of the middle class he shows little inclination to sacrifice his deeply ingrained sense of personal integrity and self-sufficiency to the rigid discipline of socialist organization and tactics. If pressed for his positive social ideals he would subscribe to a diluted cooperationism or anarchism, provided that his own scheme of values was left untouched; or not infrequently he might disclaim any ideals. For his type of mind is not given to activist formulations and sustained programs; inclined to roam forward and backward in time it anticipates coming changes and in the light of secular perspective discounts them long before they have happened. In so far as such intellectualization eventuates in any formal point of view the tendency is toward vindication of

the status quo. For once it is conceded that any transformation of social organization is ultimately barren and efforts in that direction futile, revolutionary *élan* is paralyzed. Thus the highly educated professional group, while chafing against the dominance of middle class ideals, is a distinct factor in perpetuating them.

An analysis of the various strata which comprise the middle class must take into consideration the upper levels of the working class movement. The upward swing of capitalism brought into being especially in the more highly industrialized countries a labor *élite* which began, as its standard of living improved, to deck itself with middle class vestments. Skilled workers whose high salaries permitted of savings and a scale of living approximating the small shopkeeper and tradesman were seldom haunted by the threat of unemployment. Their children received a fairly good education and later, whether by entering a profession or through marriage, went over into the ranks of the petty bourgeoisie proper. The process of differentiation within the labor movement was intensified by the appearance of an essentially bureaucratic group composed of union and cooperative leaders separated from the process of production and dependent for the continued exercise of their authority on the perpetuation of the existing system. The assimilation of educated workers into the labor bureaucracy, the reception of labor bureaucrats into the national governmental and administrative system, the rise of labor functionaries to the highest positions in the state, have still further tended to convert labor organizations into pillars of the capitalistic system or, to use the metaphor of Tarnov, into "physicians" of capitalism.

The crisis in the capitalist system, which found its first clear expression in the period of the World War and the revolutions connected with it and which now continues, after the short period of apparent stabilization from 1924 to 1928, in the world wide economic depression and its social repercussions, has seriously weakened the labor *élite* even in powerful capitalist countries such as the United States and England, where the labor movement had reached a highly developed stage; while in the social tensions and realignments in a country like Germany the labor *élite* has virtually been wiped out—and with it an important ingredient of economic and political stability.

The present crisis aside from weakening the various middle class elements has also in a

variety of increasingly perceptible ways undermined the hypothesis of an identity of interests between the monopolist-financier minority and the middle class capitalist groups. Evidences of a dilemma are manifesting themselves. To keep from being engulfed himself the large capitalist is exerting pressure on the small fry capitalist as well as on the proletarian. On the other hand, the upper minority as a group is aware of its insecurity the moment it becomes actually isolated, the moment it can no longer count upon a majority following in the ranks of the middle classes and the workers, the moment it no longer has at its disposal organizations with a mass basis which will either openly concur in capitalist premises or support it by an assumed opposition. Meanwhile the hard hit and restless middle class seeks new ways of its own, some compromise which is neither financial capitalism nor communism. The attempt of the middle class to formulate a coherent, workable system is handicapped at the outset by the fact that as a class it possesses the homogeneity neither of the trust bourgeoisie nor of the proletariat. It is a mixture of heterogeneous elements, some in undisguised conflict. The farmer desires a high protective tariff, but the artisan desires low commodity prices, while the industrialists and merchants export; the public official favors high salaries, the small shopkeeper and tradesman favor low taxes; as regards wage and social policy the salaried employees have the pronounced interests of those who are given work, but the small capitalists have the equally definite interests of those who give it. This tendency of the middle class to split up into a series of conflicting elements is illustrated most strikingly in the politics and tactics of German National Socialism. Relying for their strength on a broad middle class following the National Socialist leaders have built their rallying cries around unprecise concepts such as leadership, nationalism, anti-semitism, antifeminism and the like, carefully skirting any concrete program or promises. In its somewhat unrealistic search for an economy which is neither capitalistic nor communistic the middle class has furnished, at least up to the present, the spectacle of a man who seeks escape from his oppressor but who while in flight is recaptured and returned to his former master. The middle class may well remain for some time to come in this state of oscillation between surrender and resistance to monopoly capital; but it is also possible that at least to certain middle class elements it will become apparent that

merely nominal opposition to financial capital is not essentially different from outright support and that the logic of the situation demands active cooperation with the workers. At any rate the choice between these alternatives will be, particularly in the countries with strongly entrenched middle class groupings, one of the major determinants of the social and economic patterns of the future.

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See: BOURGEOISIE; CLASS; CLASS CONSCIOUSNESS; CLASS STRUGGLE; INTERESTS; REVOLUTION AND COUNTER-REVOLUTION; FRENCH REVOLUTION; LIBERALISM; LAISSEZ FAIRE; INDIVIDUALISM; TRUSTS; OCCUPATIONS; PROFESSIONS; BUREAUCRACY; RENTIER; MASSES; PROLETARIAT.

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MIDDLEMAN has been used as a generic term for any person who has intervened in the process of purchase and sale either between the primary producer and the manufacturer or the manufacturer and the final consumer. In the Middle Ages the middleman was customarily viewed as an interloper, an economic parasite who forced his way between producer and buyer in order to reap an unnecessary profit. In the conditions prevailing in western Europe during the fifteenth and sixteenth centuries there was probably considerable practical reason for such a view. The wholesale merchant was so often in the position of monopolist; he could so frequently take advantage of distance and imperfect information to create local "corners" in essential supplies; and the moneyed man was sufficiently a *rava avis* to be in a position to prey upon the urgent requirements of less moneyed buyers and sellers. At any rate, from this attitude was born that mass of legislation against "engrossing, forestalling and regrating" which characterized fifteenth and sixteenth century England. It was Petty who spoke of the large number of persons who "might be retrenched" since they "properly and originally earn nothing from the Public, being only a kind of Gamesters"; while Locke declared that middlemen retarded the circulation of money. At the same time Petty spoke of them as "veins and arteries to distribute back and forth . . . the product of Husbandry and Manufacture"; while later Cantillon referred approvingly to those who "buy the wares of the country . . . [and] give for them a

fixed price to sell them again wholesale and retail at an uncertain price," thereby bearing the burden of this perpetual uncertainty. Later, in the days of industrial capitalism, political economy found a justification of the middleman. Contrary to being an interloper he now became for economic theory a necessary cog in the economic machine. This justification was the principle of specialization. The middleman performed the function of linking the producer with a market demand that was becoming increasingly distant in both time and space, and in specializing on this task he could do it more efficiently and more cheaply. Moreover in buying from the producer in anticipation of sale and in carrying stocks of goods through space and time he was taking important marketing risks, thus lifting them off the shoulders of the manufacturer. For a century economic textbooks preached the virtues of the middleman and his beneficent economic role. Even the dealer who never handled commodities, the pure speculator and the dealer in "futures," was extolled as one who moderated price fluctuations by his anticipatory action and both bore and eliminated market risks which would otherwise have fallen on producer or consumer. But once again the role of the middleman has been brought into debate. Questions have been raised as to whether costs of marketing and distribution are not an unnecessary burden. Pressure comes on the one hand from new large scale marketing organizations and on the other from large scale manufacturers to displace the plethora of old fashioned middlemen and to carry on marketing in a more simplified and coordinated way. The modern advertising age, with its vogue of proprietary articles and branded goods, has witnessed a growing tendency in certain spheres for manufacturing firms to market their own products and to convert even the retail shopkeeper into a virtual commission agent.

The middleman in fact, along with the money lender, was the prototype of the later bourgeoisie. His rise synchronized with the spread of trade and of money dealings which gradually disintegrated feudal society; and his profits constituted one of the early sources of capital accumulation. Largely for this very reason the spokesmen of feudalism as represented by the schoolmen and the canonists combined with the petit bourgeois interests of working craftsmen and peasantry to vilify the activities of the "engrosser" and the "forestaller." To an increasing extent a more well to do group in the

early craft guilds came to specialize on trade and finally to dominate the guilds; later these merchant capitalist interests tended to form special mercantile companies of their own (for instance, the Tudor livery companies), thereby securing by right of charter a monopoly of their particular sphere of trade. Monopolies of this kind, granted by right of incorporation, seem to have played in all countries a primary role in the period of merchant capitalism and to have constituted a primary factor in the accumulation of merchant capital. It was common in western Europe, more particularly in the Netherlands in the thirteenth and fourteenth centuries and in Britain in the fifteenth and sixteenth, for the older and wealthier merchant interests to concentrate exclusively on the export trade or sometimes on interregional trade, to organize special trading companies in this sphere and so to form a kind of new bourgeois aristocracy. On the heels of this tendency an intermediate group of capitalists, engaged in internal wholesale trade, tended increasingly to take the role of supervising and organizing the work of manufacture, thereby paving the way for the rise of the industrial capitalist and the conversion of the merchant manufacturer into the industrial entrepreneur. In the English woolen industry this was seen in the rise of the capitalist clothier, who bought the raw wool and gave it out to small craftsmen under the domestic system and then organized the collection and sale of the finished cloth. A similar development occurred in certain branches of mining—tin mining in Cornwall and Devon, silver mining in Saxony—where various middlemen dealers in ore or else smelters came in the course of time to fill the role of capitalists who made money advances to the working miners and who later became their virtual employers.

Since the beginning of the twentieth century and especially since the World War the distributing and marketing apparatus, as distinct from that of production proper, has assumed growing proportions. In general the problem of the marketing of quality goods is more complex than that of more standardized goods of prime necessity; and the growing part played by luxury articles in the production and consumption of the richer industrial countries has given to distribution an increasingly important place. But this is clearly only part of the reason for the growing weight of marketing and distribution in economic processes. In an age of monopoly-capitalism, marketing technique with advertise-

ment as its keynote becomes a principal instrument for winning or holding a monopoly position—for capturing a special clientele of buyers, a “private market,” in which the successful seller will be partially shielded from the competition of rivals. It is arguable that under modern conditions a firm enlarges its market more frequently and more effectively by increased expenditure on marketing devices to capture consumers than by that price cutting to woo consumers which was assumed by the classical theory of competition to be the normal procedure.

This tendency with its accompanying vogue of proprietary articles and branded goods has led to a considerable narrowing of the role of the old style independent middleman. His sphere has been encroached upon in three main ways. In the field of retailing he has been increasingly supplanted by the chain store and the large department store. In the wholesale market he has been supplanted either by the manufacturer expanding vertically so as to control directly the purchase of materials and the sale of his product or else by special cooperative selling organizations operating on behalf of producers, such as some forms of the cartel or the agricultural cooperative society.

The degree of encroachment upon the position of the middleman in wholesale trade has differed widely in different countries and in different industries. In Germany the growth of cartelization in nearly all important industries has eliminated over a wide area the middleman with his specialized knowledge and connections who used to link the producer with his market. In Great Britain, on the other hand, this tendency is much less developed. Some vertical integration has taken place in heavy industry. Some 20 to 25 percent of coal, for instance, passes direct to associated concerns; and a beginning has been made in the organization of district selling agencies for the marketing of coal. Yet in textiles (particularly in cotton), in agriculture, in the handling of home grown and imported foodstuffs the old merchant firm still holds sway. In general it would seem that where a commodity is standardized and demand is regular the economies of integrated marketing are sufficiently great to lead to the displacement of the middleman. This is particularly so where the commodity is capable of being branded and converted into a proprietary article. Where, on the other hand, a commodity serves a variable quality demand, the work of marketing becomes a

more complex business; and specialization in studying particular areas of the market by specialized merchanting firms has peculiar advantages. The tendency for the middleman to persist in these cases is strengthened where the producing units are small and cannot easily undertake their own marketing.

Since the World War there has been considerable discussion of the rationalization of distribution, which is not easily distinguishable from the desire to restrict output on a falling market. It is significant of the changed spirit of the twentieth century that in a number of cases the state has lent definite aid to this tendency: for instance, in Germany the Cartel Court with its powers of compulsorily constituting a cartel; in Britain the compulsory powers adopted under act of Parliament for constituting selling associations, with quota schemes, in the coal industry. Some would have the state go further and set up new organizations, such as import boards, to fill the role which the middleman and speculator used to perform but to fill it in the social interest and on a unified scale. Apart from the experiences of war time and outside Soviet Russia this tendency has hardly as yet passed beyond the realm of projects. But the experience of wartime controls and program committees and of Soviet Russia contains much that is not only interesting but which may well be, in addition, prophetic of future successors to the middleman.

MAURICE DOBB

See: MARKET; MARKETING; RETAIL TRADE; WHOLESALE; BROKER; SALESMANSHIP; ADVERTISING; SPECULATION; PROFITEERING; RISK; COMMERCE; CAPITALISM; PUTTING OUT SYSTEM; COOPERATION; RATIONALIZATION.

Consult: Westerfield, R. B., “Middlemen in English Business, particularly between 1660 and 1760” in Connecticut Academy of Arts and Sciences, *Transactions*, vol. xix (1915) 111-445; Gras, N. S. B., *The Evolution of the English Corn Market from the Twelfth to the Eighteenth Century*, Harvard Economic Studies, vol. xiii (Cambridge, Mass. 1915); Helm, Elijah, “The Middleman in Commerce” in Manchester Statistical Society, *Transactions* (1900-01) 55-65; Adler, Georg, *Der Kampf wider den Zwischenhandel* (Berlin 1896); Grebler, Leo, *Das volkswirtschaftliche Problem der industriellen Absatzorganisation* (Giessen 1926); Marshall, Alfred, *Industry and Trade* (3rd ed. London 1920) bk. ii, chs. v-vii; Braithwaite, Dorothea, *The Distribution of Consumable Goods*, ed. by S. P. Dobb (London 1932); Dobb, Maurice H., *Capitalist Enterprise and Social Progress*, London School of Economics and Political Science, Studies in Economics and Political Science, no. 81 (London 1925) chs. xii-xix; Chase, Stuart, *The Tragedy of Waste* (New York 1925) ch. xi.

MIDHAT PASHA (1822-83), Turkish statesman. Midhat was educated for the public service and began his career in the secretariat of the grand vizier. He achieved fame as one of the most outstanding administrators of modern Turkey and became very influential among the Young Turks, who hoped to save the Ottoman Empire from destruction by reforming its political system after a western European model. In 1861 he was appointed governor of Nish (Serbia—now in Yugoslavia) and was so successful in remodeling the administrative system that his plans were adopted as the principal bases of the "law of the vilayets," which reorganized local administration throughout the empire in 1865. At this time Midhat was made governor of the vilayet of the Danube, which combined under a single administration the former vilayets of Silistra, Vidin and Nish. His rule in the provinces was marked by order and economic prosperity; he governed with the cooperation of the leaders of the native population, only a small percentage of which was Turkish, winning their support by enforcing strict equality between Moslems and Christians. An effective policing system was set up and brigandage was wiped out. Roads and bridges were built; agricultural banks were established and other measures were taken to aid the agricultural population. Education was fostered and incompetence in administration eliminated to a great degree. A severe setback was given to pan-Slavic intrigues. Midhat worked with equal success after being transferred to the governorship of Bagdad.

He was a principal actor in the deposition of Sultan 'Abd al-'Aziz in May, 1876, and that of his successor Murad V the following September, believing that he was thus clearing the way for a reforming sultan in the person of Sultan Abdul-Hamid II, who would be guided by Midhat himself. Grand vizier from September, 1876, to February, 1877, he succeeded in obtaining the proclamation of a constitution which largely embodied his ideas. The actual character of the young sultan, however, was conservative and autocratic; Midhat was banished and although he subsequently held government office was always opposed by the sultan and was finally assassinated with his connivance.

The constitution of Midhat was suspended from the spring of 1877 until 1908, when it was put into force; with a limited number of amendments it remained the fundamental law of Turkey until 1920. While on the one hand it recognized to a large extent the traditional power of

the sultan, it set up a parliament of two houses, which was allowed considerable rights of debate and decision and to which the ministry, appointed by the sultan, was responsible through a complicated process. All citizens of the empire were to be called Ottomans and to have complete political equality regardless of race or religion; finances were to be budgeted; the courts were to be independent and to administer not religious but civil law; elementary education was to be made universal; and the army was to consist of non-Moslem as well as Moslem elements.

Midhat was the author of a number of works on political subjects, including *La Turquie, son passé, son avenir* (Paris 1878, 2nd ed. 1901; tr. in *Nineteenth Century and After*, vol. iii, 1878, p. 981-1000).

ALBERT H. LYBYER

Consult: Ali Haydar Midhat, *The Life of Midhat Pasha* (London 1903); Sax, Carl von, *Geschichte des Machtverfalls der Türkei* (2nd ed. Vienna 1913) p. 375-76, 393-94, 410-13, 419-27, 485-87; Halid Edib, *Turkey Faces West* (New Haven 1930) p. 86-91; Toynbee, A. J., and Kirkwood, K. P., *Turkey* (London 1926) p. 47-49, 52.

MIELCZARSKI, ROMUALD (1871-1926), Polish cooperator. In his youth Mielczarski was persecuted by the czarist police for his socialistic activities; he was imprisoned for almost two years in St. Petersburg and was banished from Russian Poland. After studying economics in Switzerland and Belgium he spent five years in Russia, where he engaged in the mining industry and in business until 1905; in that year, following the first Russian revolution, he was allowed to return to his country. Together with Eduard Abramowski and Stanisław Wojciechowski, Mielczarski founded the Towarzystwo Kooperatystów (Society of Cooperators) in Warsaw, which developed an intensive campaign of propaganda and organization on behalf of consumers' cooperation. Mielczarski devoted himself to the economic and commercial aspects of the new movement and in the publication of the society, *Spółem* (Together), he published a series of articles containing practical hints for the organization and commercial management of consumers' cooperatives. But above all he devoted himself to the task of organizing a co-operative union and its wholesale department. The latter was founded in Warsaw in 1908 as the purchasing bureau of the Society of Cooperators; in 1911, when the obstacles created by the Russian administration were removed, it became the independent Związek Spółdzielni

Spożywców (Union of Consumers' Cooperatives). Mielczarski became the head of the purchasing bureau and later, as director of the wholesale department, the leading figure in the cooperative wholesale society. With great devotion and skill he directed the central cooperative organization under the difficult conditions of the World War and the still greater difficulties of the post-war period of economic reconstruction. An advocate of industrial democracy and an ardent patriot, Mielczarski saw in the cooperative movement an instrument of economic emancipation of the working class in Poland as well as a means of achieving the economic and consequently political independence of his country. He succeeded in organizing large masses of Polish people in cooperative unions and in instilling into them the spirit of independence and a sense of social responsibility.

MARJAN RAPACKI

Works: *Cel i zadania stowarzyszenia spożywców* (The aim and tasks of the society of consumers) (2nd ed. Warsaw 1919); *Rachunkowość stowarzyszenia spożywców* (The bookkeeping of consumers' societies) (10th ed. Warsaw 1932).

Consult: Wojciechowski, Stanisław, *Romuald Mielczarski, pionier spółdzielczości w Polsce* (Romuald Mielczarski, the pioneer of cooperation in Poland) (Warsaw 1927); Dąbrowski, Saturnin, *Program spółdzielczy Romualda Mielczarskiego* (Warsaw 1927).

MIEROSŁAWSKI, LUDWIK (1814-78), Polish revolutionary leader. Mierosławski was born in France of Polish-French parents and educated in Poland, where he came under the influence of such romantic writings as those of Mickiewicz and Lelewel and in general responded to the intense patriotic atmosphere characteristic of the years preceding the Polish insurrection against Russia in 1831; his personal experience during the insurrection still further intensified his patriotic sentiments. Capable, imaginative and endowed with a brilliant and convincing style, at the age of thirty he had acquired renown as an orator, political writer and historian. His *Powstanie narodu polskiego w roku 1830 i 1831* (The insurrection of the Polish nation . . . , 8 vols., Paris and Posen 1845-81) was considered one of the best works in the field of military literature. On the strength of his reputation and the important role he played in the Polish Democratic Society as well as in a series of international conspiracies, he assumed the leadership in the Polish revolutionary uprisings of 1846 and 1848; and he also led the uprisings in Sicily, in the Palatinate of Bavaria

and in the Grand Duchy of Baden in 1849. He became the recognized leader of the revolutionary wing in the movement which aimed at the political liberation of Poland by force of arms, as opposed to the more moderate group which believed that the cause of Polish freedom would ultimately gain more through concentration upon the slow and laborious task of political organization and economic development. Mierosławski linked the program of political liberation with that of abolition of serfdom and peasant ownership of land. He further associated the Polish revolutionary cause with the struggle for democracy in Europe and advocated the most active alliance of Polish forces with every revolutionary campaign against European autocracies. A liberated Poland, he held, would assume that civilizing function in the east which France had performed in the west. He continued his revolutionary activities undaunted by the setbacks of the 1840's; he organized international conspiracies, established military training centers to supply the revolutionary forces with efficient officers and was instrumental in bringing about the Polish insurrection in 1863. Defeated in the first battle of this uprising Mierosławski returned to Paris, where he devoted the remainder of his life to historical writing and to political controversy with other Polish émigrés.

ADAM LEWAK

Important works: *Histoire de la révolution de Pologne*, 3 vols. (Paris 1835, 2nd ed. 1838); *Kurs sztuki wojσκowej* (Outline of military art) (Paris 1845); *Rozbiór krytyczny kampanii 1831 roku i wynioskowane z niej prawidła do wojny narodowej*, 2 vols. (Paris 1845), tr. into German as *Kritische Darstellung des Feldzuges vom Jahre 1831 . . .* (Berlin 1848); *De la nationalité polonaise dans l'équilibre européen* (Paris 1856); *Pamiętnik Mierosławskiego (1861-1863)* (Memoirs of Mierosławski), ed. by J. Frejlich (Warsaw 1924).

Consult: Milkowski, Z., *L. Mierosławski naszkicowany* (A sketch of Mierosławski) (Paris 1870); Klaczko, J., *Katechizm nierycerski* (Unheroic catechism) (Paris 1859); Lewak, A., in *Przegląd współczesny*, vol. ii (1929) 295-306; Limanowski, B., in his *Szermierze wolności* (Champions of freedom) (Cracow 1911) p. 203-43.

MIGNET, FRANÇOIS AUGUSTE MARIE ALEXIS (1796-1884), French historian and journalist. Mignet is popularly remembered for his *Histoire de la Révolution française* (Paris 1824; 14th ed., 2 vols., 1883; English translations—Bohn's Standard Library, London 1856; Everyman's Library, London 1915; History of Nations series, Philadelphia 1906), but his most significant contributions were in the history of the six-

teenth century. He rose to the front rank of French historical scholarship by an unconventional route. He received his formal training in the École de Droit at his native city, Aix, practised law and after moving to Paris in 1821 devoted part of his time to journalism. Even while at Aix, however, his chief interest was in history, and he pursued his studies with such success that at the age of twenty-five he shared the prize offered by the Académie des Inscriptions et Belles-Lettres for the best essay on the institutions of St. Louis. His impulse to write on the French Revolution grew out of his contact with Talleyrand, who had been attracted by his articles in the *Courrier français*. Convinced that the revolution was the logical outgrowth of conditions in France and in Europe, he hoped that a sympathetic interpretation of it would help to stem the strong tide of reaction which had been running since 1820. The resulting volume was an astounding tour de force accomplished in four months, and the work became an instant success. After the revolution of 1830, in which he took a leading part as one of the founders of the *National*, Mignet withdrew from active politics and devoted himself wholly to history. He accepted the directorship of the archives of the Ministry of Foreign Affairs, a position which he held until the Revolution of 1848. When Guizot as minister of public instruction decided

upon the great *Collection de documents inédits sur l'histoire de France*, he gave Mignet the task of editing the papers on the Spanish Succession. The four volumes of *Négociations relatives à la succession d'Espagne sous Louis XIV* (1835-42) carried the work only to the Peace of Nijmegen, although his masterly introduction extended to the Treaty of Utrecht. Mignet's other works on the sixteenth century include the brilliant *Antonio Perez et Philippe II* (Paris 1845, 4th ed. 1874; tr. by Charles Cocks, London 1846); *Histoire de Marie Stuart* (2 vols., Paris 1851, 5th ed. 1877; tr. by A. R. Scoble, 1 vol., 7th ed. London 1887), which presented the first balanced view of the Scottish queen, and *Charles Quint, son abdication, son séjour et sa mort au monastère de Yuste* (Paris 1854, 10th ed. 1882). Mignet long assembled materials for a work on the Reformation but never completed it. As perpetual secretary of the Académie des Sciences Morales et Politiques after 1837 he did much to make that body an effective force in the development of French historical science.

HENRY E. BOURNE

Consult: Petit, Édouard, *François Mignet* (Paris 1889); Simon, Jules, *Mignet, Michelet, Henri Martin* (Paris 1890); Gooch, G. P., *History and Historians in the Nineteenth Century* (2nd. ed. London 1913) p. 193-99; Simon, Jules, "Éloge de M. Mignet" in Académie des Sciences Morales et Politiques, *Séances et travaux*, vol. cxxiv (1885) 885-924.

MIGRATIONS

PRIMITIVE.....	ROLAND B. DIXON
ANCIENT AND MEDIAEVAL.....	LOUIS HALPHEN
MODERN.....	IMRE FERENCZI

PRIMITIVE. The movements of people over considerable distances and on a large scale with the intention of abandoning their former homes for some more or less permanent new domicile have played an important part from the very beginning of human history. The general causes discernible in primitive migrations have continued operative down to the present, although with changed importance and in somewhat different forms. They may be grouped in two broad categories: the physical causes, such as great cataclysms of nature and climatic changes; and the socio-economic causes, such as mass expulsion, defeat in war by invading migrants and the more voluntary motivations, like the desire to exploit new economic opportunities or to conquer new lands.

Physical factors seem to have played an important role in prehistoric migrations. The suc-

cessive advances and retreats of the ice sheet during glacial times were thus a direct cause of migration on a large scale, for the human occupants of much of northern Eurasia and perhaps of North America were irresistibly forced out of their habitats. On a far smaller scale local cataclysms—volcanic eruptions or great floods—have doubtless rendered considerable areas uninhabitable, with the result that their occupants have had to migrate. The secular changes of climate within a given area may tend to force the inhabitants to emigrate to another locality, where the accustomed conditions are still to be found; or they may lead to an immigration or invasion of a foreign group into a region adapted to its traditional mode of life. In the opinion of many students one of the most potent causes for migrations on a large scale has been progressive desiccation. Thus Huntington contends that in

inner Asia, where the peculiar conditions of pastoral nomads make relatively slight changes in rainfall of some consequence, a pulsation of climate has occurred, in which a period of increasing aridity has been followed by one of greater rainfall, succeeded in turn by another period of desiccation. During the periods of desiccation, he believes, the pastoral nomads of this area were forced by the shortage of pasture to emigrate, and he correlates the great historic outpourings of peoples from this region with these climatic pulsations. It has been thought by some that an increasing aridity was the cause for the abandonment of many of the cliff dwellings and other prehistoric sites in the southwestern United States; in this instance, however, it is doubtful whether the degree of increase in aridity would have been sufficient to have forced the abandonment of any large proportion of sites, and this movement is explicable at least in part on other grounds.

It is probable that the second category of causes has stimulated a far greater number of migrations. Most frequent among them perhaps has been the pressure of inadequate food supplies due to increase of population. This pressure varies in its intensity and effectiveness according to the cultural status of the people. Hunting and fishing or food gathering tribes are most affected, for only a limited number of persons can draw their food supply from any given area. When this limit is exceeded, emigration becomes imperative unless the local inadequacy can be remedied by trade or the population is reduced by war, famine, epidemic or infanticide. A pastoral nomad people is limited in numbers by the size of the herds or flocks which can be fed. Among agricultural peoples the food supply may be greatly increased, particularly under irrigation, so that with the added possibility of storing large quantities of food and the development of import trade migration for the purpose of obtaining food tends to become unnecessary. War is also a potent cause of migration: the defeated may find their only safety in flight. In Polynesia, for example, this has been a frequent cause of migration. In North America the warlike prowess of the League of the Iroquois forced many of the neighboring tribes to move westward in order to escape annihilation. In South America a Tupi tribe of ten thousand fled from the Portuguese in search of an unmoled area, leaving the coast of Brazil in 1540 and migrating up the Amazon; three hundred reached Chachapoyas in Peru nine years later.

In Africa the Bushmen were driven southward from the lake region by invading Bantu peoples, who later forced them into the Kalahari desert. The irresistible movements of the Tai, or Shan, peoples of southern China into Siam and Indo-China were due largely to the pressure of the expanding Chinese. The quest of wealth or loot has also led to folk movements on a large scale. The traditional Maori migration to New Zealand was in part a quest for the valuable nephrite stone which was there to be had in large quantities. The Tungus tribes that invaded and settled in large numbers in northern China, the barbarian invasions of southern Europe, the Turkish conquest and settlement of parts of western Asia, these and many other important migrations were caused at least in part by the prospect of loot and wealth. Serious epidemics and plagues have also probably been responsible for considerable movements of peoples.

Migrations, however caused, are more or less definitely controlled or guided by factors of environment both physical and social. There is often a strong tendency for a migrating group to hold conservatively to the same type of environment; pastoral peoples, for example, attempt to remain on grasslands, where their accustomed life may be continued. But sometimes a fairly radical change may be made, as in the case of the Algonquian and some of the Siouan tribes, who abandoned their forest environment and semi-sedentary hunting and agricultural life for that of roving hunters on the treeless plains. The Aryan ancestors of the Hindus left the desert and oasis environment of Turkestan for the better watered region of the Punjab and upper Ganges valley, which was more suitable for agriculture. Topographic factors such as river courses and mountain passes have often exercised striking control over migrations. The southward movement of the Shan peoples of southern China spread primarily along the courses of the Menam and Mekong. The Scythians and other northern invaders of Asia Minor and northern Mesopotamia could pass the barrier of the Caucasus only through the centrally located Daryal Pass or through Derbent, which afforded a passage around the range's eastern end. The hordes of central Asiatic peoples poured out from this great reservoir almost wholly by way of the broad corridor valley of Dzungaria or by the narrow and more spectacular Dzungarian gate. Sea winds and ocean currents have guided emigrants from southeast Asia and Indonesia out into the heart of the Pacific,

although the Polynesians in their eastward migrations traveled in the main against the prevailing winds and currents. Land movements in one direction may be difficult or impossible because of the presence of a strong and warlike people. Knowledge of the existence of earlier offshoots or colonies of their own people may turn the course of later migrants in the direction of these established settlements.

Migration affects both the migrating group and others with whom they come in contact. The migrants may be reduced in numbers as a result of hardships, of war with peoples through whom they have to force their way or of sickness resulting from a radical change of environment. Their culture may be more or less profoundly modified on the one hand by adaptation to the new environment and on the other by borrowing from the peoples adjacent to their new settlement. Further their racial characteristics may be modified through mixture with racially distinct groups and their language influenced as a result of assimilation with the tongues spoken in the new habitat. Effects similar in many respects may be produced among the peoples through whom the migrants pass or among whom they finally settle.

Evidences of migration among living primitive peoples may be afforded by archaeological data, oral tradition, linguistic factors, racial characteristics or cultural elements. Archaeological discoveries supply the meager evidence available for the prehistoric period. The Maori of New Zealand possess abundant traditions of their migration from the Society Islands in the fourteenth century and the Leni-Lenape, or Delaware Indians, have preserved in their *Walam Olum*, or Red Book, a crude pictographic record of their legend of migration from some region probably north of the Great Lakes. The Navaho and Apache of the southwestern United States show by their Athapascan speech that they are migrants from the Canadian northwest, where most of the Athapascan tribes are found. Similarly, the affiliation of Polynesian speech with the Malay and the Mon-Khmer languages of Indo-China is one of the evidences for believing that these island peoples once lived in southeastern Asia. The blondness found among some of the Berber peoples of north Africa is believed to indicate an early immigration of peoples of Nordic type from Europe; and certain physical features of the Hottentots indicate their migration from northeastern Africa, where their mixture with Hamitic peoples must

have occurred. The cattle culture of the Yakuts, a Turkish speaking tribe of northeastern Siberia, shows them to have migrated northward from the region of the Mongolian border. The far reaching distribution of typical forms of Inca pottery is in part a measure of the wide expansion of these people in western South America. As cultural elements, however, may be diffused in trade or otherwise from tribe to tribe and people to people and may thus be found far from their source without having been carried by any migratory group, great care is necessary in interpreting such data. Thus the bronze or copper objects found in the chalcolithic culture of western China are interpreted by some authorities as evidence that the knowledge of metal was brought by an immigrant people from the west, whereas others see in these objects only an indication of far reaching trade.

The primary migrations by which man originally spread over the world can as yet be traced only vaguely. Little can be said concerning the movements in early palaeolithic times. At the beginning of the later palaeolithic, in Aurignacian times, the older Mousterian Neandertal peoples in western Europe were probably replaced by the immigration of a more modern type from northern Africa. Later in the epipalaeolithic, or early neolithic, there was probably a considerable movement of brachycephalic Alpine peoples from the eastern border regions into central and western Europe, although some students tend to minimize its importance. A later movement, in early chalcolithic times, of nomadic peoples from the Russian steppes is quite generally accepted. When and by what routes the Indo-European speaking peoples spread over Europe is still a matter of controversy; it seems most probable, however, that they came from somewhere in the Caspian region. The Ugro-Finnic peoples of northern Europe seem to have paralleled this westerly drift farther north.

The migration of man into the New World has been a much debated question with reference to both period and routes. The hypothesis that North America was first peopled from Scandinavia by way of Iceland and Greenland is now generally discredited. Suggestions as to Negro immigration from Africa at any period prior to Columbus' discovery lack reputable evidence and are as chimerical as the legends of Atlantis. The frequently proposed theory of a trans-Pacific migration from southern or eastern Asia by way of the Pacific islands cannot be ap-

plied to the original peopling of the New World, since early man was incapable of making the long sea voyages required and there is no evidence that man reached the Polynesian area until modern times. On the evidence of culture parallels it has frequently been assumed that trans-Pacific movements to South as well as North America have taken place on a considerable scale in later times. The subject is extremely controversial; some slight contacts between Polynesians and South America may have occurred during the Christian era, but there is as yet no valid evidence for migration on an appreciable scale. It is now the generally accepted theory that the primary migration as well as all other significant migrations of man into the New World took place by way of Bering Strait, but the time of the first movement still remains undetermined. Some students relying on the absence of unequivocal evidence for preglacial or interglacial man believe that these migratory movements did not take place until postglacial times. Others on the basis of the cumulative strength of recent archaeological and cultural evidence and the fact that the discovery of *Sinanthropos* in China proves the presence there of a human precursor in earliest Pleistocene times believe it increasingly probable that man reached North America prior to the last glacial phase. The older view that only a single although perhaps long continued wave of immigration came into the New World by this route, bringing a single type of man, and that thereafter all movements across the strait ceased is now generally abandoned. The theory now held is that there were a number of periods of migration, each of which periods brought different racial factors and of which the latest occurred perhaps not more than one or two thousand years ago.

The routes by which these immigrants spread over North America are still largely matters of theory. A movement southward along the Pacific coast, although in line with some of the evidence of relatively recent cultural diffusion and small scale movements, is as yet uncorroborated for any early period by archaeological evidence. Migration up the Yukon valley and thence across the Rocky Mountains into the plains and so southward seems the most probable but again lacks confirmation. The Eskimo comprise two discrete elements: one originating in the interior region west of Hudson Bay moved northward to the coast and then to the east and west; the other starting from Bering Strait or

perhaps northeastern Siberia moved eastward along the coast and amalgamated with the first. The Eskimo also moved southward from the strait and displaced earlier Indian peoples nearly as far as Mount Saint Elias. The Athapascan stock has moved south and east from the interior of Alaska and the Mackenzie valley. One branch followed along the Columbia River to the Pacific coast and thence southward as far as northern California; another moved south through the plains and then turned westward into New Mexico and Arizona. The Algonquian tribes seem to have spread from the region around the Great Lakes; some moved eastward to Labrador and the northern Atlantic states, whereas others turned westward into the plains, some perhaps extending their wanderings as far as the Pacific coast. The Siouan stock seems to have had its proximate area of dispersal in the lower Ohio valley and the region between the Great Lakes and the Mississippi; thence some tribes moved eastward to the central Appalachian region, whereas others moved west into the plains, some retaining their agricultural and village life, others taking up a purely nomadic hunting life. The Iroquoian tribes moved eastward and northeastward from an earlier habitat which was perhaps in the middle Mississippi valley region. One branch passed south of the Great Lakes and then down the Saint Lawrence, displacing the Algonquian tribes in Ontario and New York; another turned more to the southward, ultimately settling along the western slopes of the southern Appalachians. The Caddoan tribes migrated northward from the region of Louisiana and eastern Texas, the Pawnee stopping in Nebraska, the Arikara going to the bend of the Missouri River in North Dakota. The Creeks, Choctaw and other Muskogean tribes may have drifted eastward from the southern plains. The Uto-Aztec tribes have migrated over a wide territory. From a proximate original habitat in the region of Utah and Nevada and the adjacent western borders of the northern plains they have moved southwest to the Pacific coast in southern California and southward through the highlands and Pacific coast of Mexico to the valley of Mexico, where the Aztecs and others stopped; still other groups continued along the western coast of Central America as far as Costa Rica and one small colony to the gulf coast of Panama. Opinions in regard to the movements of the Mayan tribes differ, some holding that the movement has been from the north to the south and southwest, whereas others

believe the early home of the stock lay in Guatemala and Honduras.

The primary migrations which first brought man into the continent of South America must have filtered in by way of the narrow corridor of Panama. The chain of the Antilles presents an alternative but doubtless much less important highway. To immigrants by way of Panama three possible courses were open: a southward movement along the Pacific coast; a movement up the Cauca and Magdalena river valleys to the highlands, along which the way lay open toward the south; or an eastward drift along the Caribbean shore to the mouth of the Orinoco, up whose course the route led to the great Amazon basin. There is evidence to indicate in a general way the lines of the migrations of some of the more important linguistic stocks on the continent. The Chibchan stock of Colombia and northern Ecuador seems to have extended from the south northward, reaching as far as the borders of Nicaragua. The Quichuan stock, of which the Incas were a part, probably moved southward along the highlands, from Ecuador almost to the Bolivian border. The movements of the Aymará are still highly problematical. The Araucanian tribes of Chile are now thought to have been originally a nomadic hunting folk of the Argentine pampas, which moved westward across the Andes to the Chilean coast. After the conquest by the Spaniards some retraced their steps eastward into the pampas. The Arawak stock seems originally to have been settled on the Caribbean shore of the continent. From here one branch followed the chain of the Antilles northward as far as Cuba, whereas others moving southward followed along the eastern base of the cordillera as far as Bolivia. If Rivet is correct in regarding the Uru as belonging to this stock, they occupied also a portion of the high, desert Bolivian plateau south of Lake Titicaca. The Carib tribes, on the other hand, have generally been thought to have moved from central Brazil northward and westward, following in general the Rio Negro and the Amazon and Orinoco rivers to the Caribbean shore, disrupting the older Arawak tribes and pressing on further through the Lesser Antilles, where they exterminated or absorbed the Arawakan aborigines. Recently a contrary view has been put forward by Métraux, who believes the Caribs to have originated north of the Amazon and to have moved southward to central Brazil. The Tupi or Tupi-Guarani tribes spread according to Métraux from the region of the Amazon-Paraguay divide, the Guarani mov-

ing south into what is now Paraguay and others, such as the Tupi proper, going eastward to the Brazilian coast, whereas still others moved westward up the Amazon to eastern Peru and Ecuador. Two important movements in this stock occurred just after European contact, the Chiriguano migration from Paraguay westward to the Bolivian foothills of the Andes and the Tupi migration up the Amazon to northeastern Peru.

On the Asiatic continent the Samoyeds and various other arctic Ural-Altaic tribes moved, probably at an early date, northward to the arctic coast of Siberia, whence they drifted westward into northern Russia. From the region about Lake Baikal the Yakut migrated in early mediaeval times northward down the Lena valley nearly to the arctic coast. The Tungus tribes from an early home in the valley of the Amur and Manchuria and perhaps extending into the lower Yellow River valley in China migrated northward and westward; subsequent movements of these tribes as well as of the nomads mainly of Turkish speech who moved into western Asia and Europe from the central Asiatic region are considered in the following section (ANCIENT AND MEDIAEVAL). Probably extending back as far as neolithic times there took place eastward migrations of northern and eastern European peoples which contributed to the prehistoric population of China and Japan. From the Aral-Caspian basin region peoples speaking Indo-European languages migrated southward in the second millennium B.C. The ancestors of the Hindus turned eastward into the Punjab and the upper Ganges valley and later overran most of India. Others turned westward and crossing the Iranian upland came to the borders of Mesopotamia, where as the Kassites they invaded and conquered Babylonia, which they ruled for some six centuries. Another group, the Mitanni, established themselves on the Tigris and adjacent parts of the fertile crescent. Later about the beginning of the first millennium the Medes and subsequently the Persians dominated the Iranian plateau and conquered much of western Asia. The Indo-European element among the peoples of Asia Minor, as illustrated, for example, by the Hittites, seems to have migrated hither perhaps as early as the third millennium across the Bosphorus from Europe. In southeastern Asia the Chinese, Tai and Tibeto-Burman peoples have migrated widely. There is as yet no positive evidence that the Chinese were, as some have believed, immigrants from central Asia. From their earliest known habitat at the

bend of the Yellow River, however, they spread slowly to the northeast and south, displacing and absorbing the previous, non-Chinese peoples. In their southward advance they forced the Tai speaking tribes to migrate down the valleys of the Menam and Mekong and to displace and conquer the older Mon-Khmer tribes of Indo-China. One group, the Ahom, moved more to the west, and in early mediaeval times occupied Assam, to which they gave their name. The Tibeto-Burman tribes of eastern Tibet began, at least as early as the beginning of the Christian era, to migrate southward along the valleys of the Irrawaddy and Salween. The Karens were perhaps the first of these, followed by the Burmese and later the Kachins. They came ultimately to occupy most of what is now Burma, displacing the older Mon-Khmer peoples. Some of the Tibeto-Burman tribes moved further west, occupying the Naga Hills region of Assam. Two migratory movements seem to have reached Japan: one with a considerable north European element came in by way of Korea from the west, whereas a second migration of peoples allied to the Malays and Polynesians came in from the south, either from the Chinese coast by way of Formosa and the Philippines or the Micronesian chain. The former migration was early, the latter perhaps as late as the middle of the first millennium B.C.

In the Oceanic area migratory movements have been of great importance. The earliest traceable would seem to be that of the Negrito peoples, who passing eastward from Indo-China at the end of the glacial period spread through much of Indonesia, while these islands, still a continuous land area, formed part of the Asiatic continent. They were followed by peoples of Australoid type, who migrated at least as far as New Guinea and thence turned southward to occupy the Australian continent. A wave of Negroid tribes then followed, which dominated Melanesia and spread but slightly into Australia. A considerable migration of peoples of north European type came from eastern Asia by routes which are still uncertain, and spread far into Polynesia. A last great migration was that of the Malayan peoples, who from southeastern Asia poured out into Indonesia, overwhelming the older population; then passing along the edges of Melanesia and through Micronesia they flooded into Polynesia, giving it its dominant population at the period of discovery. This Malayan migration took place, so far as Polynesia was concerned, apparently in two waves, the latest not

leaving Indonesia until this latter region had been to some extent influenced by Indian culture, which reached there about the beginning of the Christian era or possibly some centuries before.

In Africa one of the earliest migrations was that of the Hamitic or proto-Hamitic peoples, who moving from the region of the horn of Africa (or perhaps coming as immigrants from southern Arabia) passed into the Nile valley and thence westward north of the Sahara. This movement was largely completed by early pre-dynastic times. During the early centuries of the Christian era and on into mediaeval times further migrants from this group pushed westward through the Sudan to Nigeria, profoundly affecting the older Negro peoples there and in other regions along the western coast. Hamitic influences were also carried southward and southwestward by the migrations of the Bantu peoples, among whom the Hamitic element was strongest along the east coast. The Bushmen of southern Africa seem to have moved southward from the northern lake region, following the grasslands to the Zambesi; after crossing the latter they spread over most of the southern part of the continent. The Hottentots followed at first the same general direction but turned more to the west, crossing the upper Zambesi and continuing north of Kalahari, then turning south along the western coast. At least as early as the middle of the first millennium B.C. there had begun a Semitic movement from southern Arabia into Abyssinia. The Malayan migration to Madagascar, from which a large proportion of the present population is derived, is now thought to have gone around the margins of the Indian Ocean rather than directly across it; thus it may in part at least have followed the east African coast southward, coming to Madagascar from the west.

ROLAND B. DIXON

ANCIENT AND MEDIAEVAL. The most important migrations in ancient and mediaeval times were those of nomadic peoples who wandered continuously with their families and belongings and those of maritime peoples who left their homes to seek new lands. These migrations in turn stimulated others as the migrants displaced settled peoples whom they were unable to assimilate; many Armenians, for example, were driven to Cilicia and to other parts of Asia Minor by the successive invasions that took place in the Near East, and the Balkan Slavs and Bulgars were continually driven back under the pressure of

nomads from the Russian steppes. Likewise the invasion of Britain by Germanic tribes during the fifth and sixth centuries forced some of the Britons to migrate to the region which is now Brittany. Sometimes the tactics of the conqueror took the form of mass expulsion, as in the case of the Saxons, whom Charlemagne in 799 commanded to move to the interior of the Frankish empire. In the case of the Norman conquerors in southern Italy and Sicily and of some of the crusaders in the Holy Land the migrations were comparable to colonization projects, and in that of the Greek and Phoenician colonists who traveled the length of the Mediterranean (*see* COLONIES) colonization was indistinguishable from the movement of maritime peoples.

The chief reservoir of the nomadic migrations by land during antiquity and the Middle Ages was central Asia—Mongolia, Chinese Turkestan and the neighboring territories which extend into the steppes of European Russia. The soil of most of this region is unsuitable for agriculture; and nomads, sometimes suffering great privation, for centuries grazed their stock in these immense pastures. These unstable nomadic peoples became plunderers of their sedentary neighbors whenever opportunity arose. Their plundering activities and consequent migrations followed a cycle of development. Successful exploits of armed nomads brought to the victors wealth and prestige among their fellow tribesmen, who gathered around them, paid homage to the successful chief and followed him in his raids. The group grew larger and its audacity increased as the sedentary neighbors lost control over the steppes adjacent to their frontiers. The nomads then advanced in masses beyond these frontiers; they succumbed to the wealth of the invaded countries, to the facilities offered by the new environment and were gradually won over to the new life. The parts of the group which remained nomadic became weaker with the growth of the number of permanent settlers. Other nomads then profited by this weakness and displaced the occupants of the steppes bordering on the civilized countries; these peoples were thus forced to complete the migration toward the sedentary countries or to amalgamate with the newcomers.

The sedentary peoples of the Old World were concentrated in ancient times on the shores of the North, Baltic and Mediterranean seas and the Atlantic, Indian and Pacific oceans. This left unsettled an immense area covering a large part of continental Europe and Asia and forming

a continuous stretch of land which facilitated migrations. The mountain chains that interrupt this stretch could be crossed through passes or in the case of the Ural Mountains through large depressions—those of the Caspian and Aral seas on the one hand and the passes of Ekaterinburg on the other. The nomads surged from the borders of China to the Danube and the Rhine, propagating customs, ideas and art forms.

The history of the nomads of the Russian and Asiatic steppes is known from the end of the third century B.C. At that time there emerged in Mongolia a confederation of peoples, probably of Turkish origin, whom the Chinese classed under the general name of Hsiung-nu. These peoples advanced toward the southeast, southwest and west, driving before them in the direction of China, Syr-Darya and the Ural Mountains those nomads whom they encountered—the Yuechi of Kansu, the Saka of western Turkestan and the Sarmatians of the west Siberian plains. The last, apparently related to the Iranians, invaded the Russian steppes in the second century B.C., displacing the Scythians, who had come from Asia and had for a long time been developing from nomadism to a partially sedentary life on the borders of Greek territories. The Sarmatians then moved toward the Greek borders, where their vanguard entered into contact with Greek civilization and incorporated certain of its aspects with their borrowings from sedentary Iranians. In the same century the Saka were driven to Seistan, south of Afghanistan, while the Yuechi were forced to withdraw to Sogdiana and Bactria. The Saka continued their migrations in the first century B.C. as far as Baluchistan, the mouth of the Indus and the Gujarat peninsula; the Yuechi, driving the Saka before them, advanced as far as Afghanistan and Seistan. Both peoples amalgamated with the tribes whom they conquered and thus passed from a nomadic to a sedentary life.

Other nomads emerged from the shores of the Baltic—the Cimbri, who were either Germans or Celts, and later the Teutons, who in the last years of the second century B.C. twice penetrated into Roman territory. During the first century B.C. numerous Germanic tribes from southern Scandinavia and from the southern coasts of the Baltic gradually reached the neighborhood of the Rhine, the Danube and the Prut. While this progressive migration of Germanic tribes toward the southwest, south and southeast was taking place the Hsiung-nu in the Far East began to feel the pressure of other northern nomads—

the Mongols (among whom were the Sien-pi) and the Tungus. The Hsiung-nu were forced to move toward China and the Russian steppes, where the Sarmatians found themselves caught between the vanguards of the Hsiung-nu and the Goths, who had come from the northwest. In the third century A.D. China was invaded by the Hsiung-nu. In the first half of the following century the wave of the Mongolian Juan-Juan spread over China, while the Germanic nomads began to migrate in larger numbers toward the Roman Empire, the frontiers of which started to break down. In the second half of the same century the Hsiung-nu of Mongolia were no longer able to resist the pressure of the Juan-Juan and consequently many migrated toward the far west of Mongolia. After violent struggles they emerged beyond the Altai Mountains in the steppes extending to the north of Lake Balkhash and the Aral Sea, whence they moved about the year 355 toward the Volga.

The continued migration of these Hsiung-nu, whom the westerners called Huns, had important repercussions in Europe. On the one hand, the Ostrogoths and Visigoths were forced to move from southwestern Russia toward the inner regions of the Roman Empire. On the other hand, the last of the Sarmatian people—the Alani—were driven toward the Tisa valley and then toward Germany, where they displaced many of the Germanic nomads who had preceded them, especially the Vandals and the Suevians. In 406 this group of Alani and Germans finally reached and crossed the Rhine. Their migrations continued throughout Gaul and extended to Spain. The Visigoths, who had advanced through Moesia and northern Italy as far as northern Gaul, met the Vandals a few years later south of the Pyrenees and finally drove most of them from the Iberian Peninsula toward north Africa, where they moved toward Tunis. Meanwhile the Ostrogoths, who followed the Visigoths, settled in Italy. Other Germanic tribes, such as the Franks, Burgundians and Alemanni, established themselves in Gaul and its vicinity. The Huns, who followed the Danube Germans, finally reached the country which at a later period became Hungary, whence they tried without success to push their migration farther. The migrations of the Huns ended in 453 with the death of their chief Attila after their great campaign into Gaul and Italy.

During the fifth century Asia continued to witness great displacements of peoples. With the retirement of the Huns toward the West the

Juan-Juan extended their sway over all central Asia, driving the Ephthalites, sometimes called the White Huns, who were probably of Mongolian origin, toward the southwest into Afghanistan and India, where they finally settled toward the end of the fifth century and in the sixth after having ravaged the region. The Tu-kine, who were Turkish nomads, supplanted the Juan-Juan in central Asia in the middle of the sixth century, conquered the nomads who had preceded them and drove out the recalcitrant tribes, notably the Avar group. The latter withdrew toward the Ural Mountains and the Volga, whence they reached the Danube and the Tisa plain, displacing there the last of the Huns and driving toward Italy the Germanic Lombards, who settled to the south of the Alps.

For a time equilibrium seems to have been attained in central Asia. The Chinese Empire had become strong under the Han dynasty; the numerous nomadic tribes which had come from central and northern Asia were torn by inner dissensions, such as invariably occur as soon as opportunities for conquests and raids disappear. The West would have been spared new migrations had not the decadence of the Persian and Byzantine empires offered to the Semitic nomads of Arabia an opportunity for a great migration. United by Mohammed the Arabs in the seventh century and in the first half of the eighth spread like a tidal wave over Syria, Persia, Egypt, Asia Minor, Armenia, the whole of north Africa and Spain; they penetrated into Gaul, invaded Afghanistan, Bactria, Sogdiana, Ferghana, reached the neighborhood of Chinese Turkestan, penetrated into India and later conquered Sicily. Among other peoples carried along by the stream of the Arab migrations were the Berbers, who formed the core of the Moslem population in Spain.

The Arab penetration into Asia north of Sry-Darya and the Arab victory on the banks of the Talas in 751 had far reaching results. They contributed to the ruin of Chinese prestige and to the collapse of the reigning dynasty; they offered the nomads of central Asia an occasion for attacking the frontiers and finally for settling upon the territory of China. A group of these nomads, the Khitan, acquired control of Peking. As a result of the Arab victory some of the nomads of western Asia had to withdraw toward Europe; about the middle of the ninth century the Magyars crossed the Ural Mountains, spread over eastern Russia and reached the shores of the Sea of Azov, whence they were soon displaced by

other Asiatic tribes, the Petchenegs. The Hungarians subsequently reached the Danube and the Tisa, conquered the descendants of the ancient Avars and ravaged western Europe until their defeat on the Lech by Otto the Great in 955, after which they gradually settled in what is now Hungary.

When the Sung dynasty in China became powerful the nomads who remained in central Asia were forced to move westward. A group of Turks was thus driven toward the Ural Mountains and the Volga; another under the leadership of the Seljuk family migrated toward the Iranian territories of the Near East. The hordes of Seljuk Turks overran Khurasan, Persia and Armenia, submerged the Byzantines at Manzikert (1071) and filled Anatolia and Syria.

As a result of a realignment in the thirteenth century of the nomadic tribes of central Asia, a group of Manchus, the Juchen, began to attain dominance in China, while the Mongolian tribes, which up to that time had been wandering over the mountainous region between Lake Baikal and the upper valleys of the Onon and the Kerulen, became in the thirteenth century under the leadership of Genghis Khan the masters of all Mongolia and conquered northern China, eastern Turkestan, Afghanistan, Persia, Russia, a large part of eastern Europe, Asia Minor, Mesopotamia, Syria and finally southern China. Although the year 1280 marked the close of the era of their great conquests, migrations of the peoples of central Asia continued. The Ottoman Turks, driven out of Khurasan at the beginning of the thirteenth century by this Mongolian invasion, a century later reached Asia Minor, whence they migrated to the Balkan Peninsula. The capture of Constantinople in 1453, which was merely the last act of their gradual conquest of the whole ancient Byzantine Empire and of the Balkan Peninsula, was followed by their expansion toward Hungary and the Adriatic.

Apart from colonizing movements the only great maritime migrations which occurred during this period were those of the Germanic tribes into Great Britain and those of the Scandinavians. The maritime tribes of northwestern Germany, the Angles, Saxons and Jutes, attempted during the fifth and sixth centuries to conquer the soil of Great Britain. The Scandinavian migrations were at first merely a continuation of the Germanic migrations. Starting, at least for the most part, from Scandinavia the Germanic tribes crossed the Baltic and spread gradually over Germany, whence many of their

number migrated to the Roman Empire. Those who remained in Scandinavia—the Danes, Norwegians and Swedes—gradually advanced toward the southern part of the peninsula. The Danes then crossed the straits which separated them from the Jutland peninsula and from there reached the Eider at the beginning of the sixth century. Beginning with the seventh century the Norwegians migrated westward to the Shetland and the Orkney Islands and in the eighth century to the Faroe Islands and the Hebrides; they also pillaged the coasts of Scotland and Ireland. The Swedes moved toward the Gulf of Riga and the Gulf of Finland, whence a part of them, the Varangians, continued their migration toward the Dnieper valley. In the ninth century these migrations assumed wide proportions. The Norwegians settled in Ireland, the Danes in England; both groups also migrated to the Seine basin and to Normandy—a country which the Normans, “men from the north,” finally obtained by the treaty of Saint-Clair-sur-Epte negotiated in 911. Between 860 and 870 the Norwegians invaded Iceland; in the tenth century they penetrated Scotland and before 1000 they reached Greenland, whence they undoubtedly reached America, without, however, settling there. At the end of the tenth and at the beginning of the eleventh century England was invaded again by the Danes, who colonized it under Canute.

It has been maintained that the Vikings were sons of large families who were compelled to leave their homes because the soil of Scandinavia was not sufficiently fruitful to sustain them. Their migrations have thus been interpreted as the emigration of the excess population; this explanation is unsatisfactory for mass migrations, especially nomadic migrations, which are to be understood in terms of the prospect of conquest and settlement offered to impecunious peoples by countries which are too weak to resist invasions. The theory may, however, explain limited migrations; for example, many Normans who marched to southern Italy with Robert Guiscard were the younger sons of families who had no prospects at home, and the same was true of many knights who marched with the crusaders to Syria.

The question of the numerical importance of the migrations is in many instances insoluble. Some authorities maintain that certain provinces of the Roman Empire, particularly Gaul, attracted Germanic invaders in masses sufficiently large to modify the ethnic composition of these

regions. Others assert that these tribes at once amalgamated with the native population and that they became the masters of the invaded countries despite their small numbers only because they had force at their disposal. The fact that the Germans adopted the language of the people whom they conquered cannot be taken as a proof of the small number of the invaders; nor can the fact that the Arabs imposed their language on their subject peoples be considered to prove the large number of the former.

The problem is all the more complex since migrating populations seldom involve pure ethnic groups. The Arabs carried along with them in their migrations tribes which had nothing in common with the people of Arabia. Similarly, other nomads of central Asia migrated with the Huns; the same holds true of the Turks and the Mongols. Thus the problem of race mixtures resulting from migrations is extremely complicated. The Scandinavian type can still be easily recognized in Normandy and the Mongolian type in Russia, but in general the ethnic elements are so thoroughly intermixed that the ablest ethnologist cannot separate them. Race mixture, always a gradual process, is sometimes delayed by the policies of the conquering peoples. Thus during the reign of the caliph Omar (634-44) and later under the Ommiad caliphs the Arabs lived as masters in the countries which they subjected to military occupation. Far from the cities of the natives the Arabs of the annexed provinces founded military settlements, such as Al Kufa and Basra in Iraq and Fustat in Egypt, to which they transferred the Arab families, forbidding them to mix with the inhabitants of the conquered country, who were heavily taxed. The Abbasside revolution in the middle of the eighth century did away with this subjection but did not accelerate the fusion of the races. The result of the Arab migration consisted therefore in a unification of religion, language and culture rather than in race mixture.

There have been prolonged discussions concerning the social and political transformations caused by migrations. Some authorities maintain that after the Germanic invasions the life of the conquered people continued to go on in the same way as before the conquest and that the only change experienced by them was a change of masters. It is true that the Germans at first carefully avoided all interference with the Roman machinery of administration, whose equivalent they had not possessed; that old taxes continued, as far as possible, to be collected by

Roman fiscal employees under the supervision of the new masters, who appropriated the collections; that the Germans long permitted the continued operation of the Roman codes. But the invaders refused either to adopt these codes or to apply them to cases in which Germans came into conflict with people who were under the jurisdiction of the Roman law; consequently Germanic codes gained ground and society was gradually transformed.

LOUIS HALPHEN

MODERN. Migrations in modern times have assumed new forms. They have tended to be less predominantly movements of groups and more the movements of individuals seeking economic settlement or transient work in other lands. Modern migrations have been largely controlled by governmental policy; freedom of migration, first generally recognized in the nineteenth century, has again been largely circumscribed in the post-war period in the interest of national policy. The overseas discoveries from the fifteenth to the seventeenth centuries and the development of colonies in the New World added to the traditional continental movements important intercontinental migrations. In addition the modern period, especially since the rise of industrialism, has witnessed the development on an unprecedented scale of intranational movements of workers, principally from rural to urban centers and from one economic center or region to another in the same country.

Intercontinental Migrations. Colonizing activities by European countries exhibited certain common characteristics but also many important variations in character, motive, number and composition. European governments, guided by mercantilist conceptions, did not encourage migration. The dangers of travel and the difficult conditions to be encountered overseas created psychological barriers to migration which were overcome only by the most oppressed and persecuted groups. The character of migration from European countries was ultimately determined by the conditions which developed in the colonies. Every colonizing group sought to transplant its culture to its overseas settlements. This policy succeeded in those territories which were sparsely populated and where the natives stood on a low level of civilization, as in America north of Mexico, or where the native population was dying out at the time of settlement, as in Australia and New Zealand; it was less successful where, as in Central and South America, the

native population was more dense and had already attained an agricultural civilization and a well organized political society and city life. These states were destroyed by the conquerors, and the ruling classes were displaced by a new group, most of whom were the offspring of intermarriages of the immigrants with the native population. In the eastern Asiatic colonies, where the native population possessed a high degree of culture, the conquerors had to confine their activities to the supervision of the ruling classes without interfering with the cultural and economic conditions of the native population; consequently no mass migrations to these regions could take place. The white conquerors and immigrants were confronted with unusual difficulties whenever, as was the case in northern and southern Africa, a dense native population gradually became aware of its racial unity, accepted western civilization and used it to combat the supremacy of the invaders or where immigrants of a foreign European nation had to be attracted because of the shortage of labor in the native country; rivalries were provoked which were only rarely and gradually displaced by a new political solidarity.

The colonial policies of most of the European nations were directed primarily to the conquest of countries rich in rare spices, pearls and especially in precious metals. Originally the Spanish kings attempted also the agricultural colonization of the West Indies; Columbus, for example, partly financed by means of royal subvention, took on his voyages farmers, domestic animals and seed. After the conquest of the rich gold and silver fields, however, agricultural settlement was neglected, particularly since the population of the mother country was insufficient and unprepared for large scale colonization, and the immigration was oriented toward Mexico and Peru. Immigration was confined to a limited number of individuals who were obliged to take an oath of allegiance to the king and the Catholic church. For a long time these immigrants were brought overseas only for specified brief periods; later immigrants were generally not allowed to return to the mother country. Non-Spanish immigrants and particularly heretics were allowed to enter the colonies only by special permission and were constantly subjected to intolerable restrictions. An attempt was made to prevent the creation of any independent colonial community whose local interests might possibly come into conflict with the financial interests of the Spanish monarch.

The greatest obstacle in the way of an intensive colonization by Europeans was presented by the demographic and economic conditions of the mother countries. The population of Spain before 1492 totaled approximately 9,000,000; by 1694 the population had shrunk to less than 6,000,000, partly because of the expulsion of the Jews and of the Moors. Although the Cortes complained about the excessive emigration to the colonies, actually this played an insignificant role. In the archives of Seville, the only authorized port of embarkation at the time, the number of records of emigrants to the colonies between 1509 and 1790 totals about 150,000; the documentary material for a number of years is, however, incomplete or missing. Pereyra has estimated the annual number during the sixteenth century to be 15,000, but this figure appears to be excessive for the period before the discovery of Peru. Benzoni's estimate that the number of white colonists in Spanish America in 1550 was not more than 15,000 seems to be probable in view of the great mortality of emigrants en route and among the settlers. According to Velasco the Spanish conquests between 1492 and 1542 were accomplished by not more than 80,000 men under the direction of 2000 leaders. A statistical report of the Council of the Indies dated 1570 estimates that there were then in Spanish America 32,000 Spanish households and 4000 large feudal estates. Besides the feudal landowners 10 percent of the immigrants were priests and the rest rural colonists, artisans, miners and soldiers and a few artists, physicians and lawyers. There were many déclassés and adventurers of the upper and middle classes as well as convicts and military deserters who had had the choice between going to prison or to the colonies or who had been sentenced to deportation. As late as 1728 the colonization of Brazil was connected with the discovery of gold fields.

Portugal, which had conquered and settled the Canary Islands in 1404 and had engaged in colonizing work in Brazil, discovered in 1500, had in other countries merely established administrative offices. In 1580 Portugal was united with Spain; when after sixty years these countries separated, Holland, Great Britain and France had become great colonial powers and had destroyed the Portuguese empire. These powers recognized the right of Spain and Portugal only to those colonies which they had actually settled. They proclaimed the principle of *mare liberum* in opposition to that of trade monopoly. Holland with its colony on the Hud-

son from 1610 to 1674, Sweden with its settlement on Delaware Bay from 1637 to 1655 and France in Canada and Louisiana were able to bring to America only relatively few settlers. In 1763 there were only approximately 60,000 Frenchmen in North America.

In Great Britain radical changes in agricultural organization and technique and the spread of enclosures created in the sixteenth, seventeenth and eighteenth centuries a surplus of rural population, a part of which was forced to emigrate. As the only colonial power which could supply a large number of immigrants qualified to establish productive settlements Great Britain eventually acquired control of all North American colonies and the greater part of the Spanish Antilles. The British government was interested in securing raw materials, particularly wood, which were necessary for the home industries. Three important groups of British settlements were established on the Atlantic coast in the seventeenth century: Virginia and Maryland, the New England colonies and settlements on several islands in the West Indies. Large tracts of land were granted by the crown to titled landowners and chartered companies and colonies were established by these grantees. Some of the settlements later received independent charters from the home government. It is estimated that at the peak of emigration during the seventeenth century about 10,000 persons left the British Isles annually.

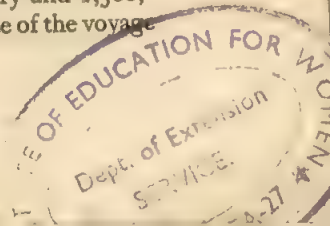
The history of the Virginia colony begins in 1607 with the settlement of 105 Englishmen by the London Company. The immigration was at first meager. The scarcity of workers for tobacco raising led to the recruiting of indentured labor; between 1635 and 1705 from 100,000 to 140,000 indentured servants were brought to Virginia, but the number in actual service at any particular time probably never exceeded 10,000. After reimbursing their masters for the cost of passage indentured servants generally succeeded in obtaining cheap land and establishing themselves as free agriculturists. Another group of free landowners was recruited from English peasants who paid their own passage in advance. Similar conditions obtained in the Catholic colony, Maryland, which was established in 1634 and where by 1671 the population totaled between 15,000 and 20,000 persons. During the second quarter of the seventeenth century discontented Catholics turned to the West Indies which had been taken by England from Spain, and which were granted by the crown to the earl of Carlisle,

a Catholic convert; 50,000 persons settled in Barbados between 1627 and 1647.

In the New England colonies the first successful settlement, New Plymouth, was founded in 1620 by the Puritans who arrived on the *Mayflower*, numbering only 102 persons, including children. The territory of the Massachusetts Bay Company, which received a charter in 1629, became the chief goal of the migration of the English dissenters seeking to escape the political absolutism of Charles I and the religious absolutism of Archbishop Laud. Similar motives led to the founding of Connecticut in 1633, Rhode Island in 1636 and New Haven in 1638. Many of the first Puritans who came to America with the intention of engaging in agriculture became fishermen, shipbuilders and traders. With the economic development of the colonies they began to attract not only discontented gentlemen, ministers and small landowners but also artisans, laborers, fishermen and sailors. These colonists maintained fewer indentured servants than did those in Virginia; the few that were brought to New England were employed chiefly as domestic servants. At least 20,000 Englishmen had migrated to the New England colonies by about 1640. It has recently been estimated that the population increased through immigration from about 28,000 in 1640 to about 85,000 in 1660 and 275,000 in 1700.

Emigration from the British Isles declined after the Restoration as a result of improved conditions at home and because of the effects of the navigation acts upon the colonies. A return movement set in; thus 607 persons left Barbados in 1678-79. The closing of continental markets to direct American exports of tobacco by the second half of the seventeenth century ruined the small planters in the tobacco colonies; only the large planters with their Negro slaves (extensively used after 1680) were able to cope with the unfavorable conditions. The indentured servants, who no longer had the opportunity of becoming economically independent, as well as the small immigrant landowners migrated to the newly established northern agricultural colonies, Pennsylvania, Delaware and New Jersey, a movement which lasted fifty years. French Huguenots and English, German and Swiss immigrants also settled in the plantation colony of Carolina.

The number of emigrants from the British Isles to the New World totaled probably about 500,000 in the seventeenth century and 1,500,000 in the eighteenth. In the course of the voyage



and directly subsequent to it the rate of mortality was at least 15 percent. The proportion of women emigrants to men from Scotland was one third in 1774, while according to the London statistics of 1635 it was only one sixth. Because of the high mortality and the effect of the scarcity of women on the marriage rate the natural increase of the population was relatively small and large numbers of new immigrants were necessary to supply the labor needs of the colonies. In the eighteenth century the British government endeavored to remedy the increasing shortage of labor by a liberal policy toward immigrants from continental Europe; in addition in 1717 it passed a law over the protests of the colonists which resulted in the transportation to the southern colonies of 50,000 criminals by 1776. As the British conquered new territories they tried to induce discharged officers and soldiers to settle by offering them special privileges; thus when the fortified harbor of Halifax was created in 1749 there were established there about 2500 colonists of whom the greater part were dismissed soldiers.

The great migratory movement of the century was that of the Presbyterian Scotch-Irish from Ulster, 4200 of whom emigrated to America in 1718 because of economic, political and religious discontent. After the famine of 1740 the average annual number of these immigrants rose to 12,000; in the course of the next fifty years their number totaled half a million. There were also several waves of English and Scotch emigration due to economic distress, but Irish Catholics began to settle in the United States and Newfoundland in considerable numbers only toward the end of the century. This type of emigration assumed its largest proportions between 1763 and 1775 as a result of the transformations taking place in Scotch agriculture and the extreme poverty in Ireland. According to the incomplete emigration lists found in the Public Record Office 3746 persons emigrated from England to North America and 370 to the West Indies in 1774, while the number of people who left Scotland during that year for North America was 1185 and for the West Indies 68. According to other sources the Scotch-Irish emigration from Ulster to America between 1769 and 1774 was 8700 annually. Since the number of illegal emigrants must have been no less than 5000, the total number of the emigrants from the British Isles averaged annually during this period about 20,000. Mass migrations, which were often stimulated by unscrupulous agents, led the govern-

ment to resort to police and fiscal measures in order to prevent depopulation; for example, orders were issued to the Scottish customs houses to forbid the loading of ships with passengers beyond average capacity. After the American Revolution the United States prohibited the importation of convicts and encouraged immigration; one of the colonists' grievances, as stated in the Declaration of Independence, had been that the English king had tried to interfere with immigration and with the settlement and the naturalization of the colonists in America.

After the Peace of Paris in 1763 British emigration, particularly from Scotland, was directed mainly to Canada and Cape Breton. Between 1783 and 1784 approximately 24,000 English loyalists emigrated from the United States to Canada, especially to Nova Scotia and New Brunswick, where they were given free land, as were the soldiers who had taken part in the wars between England and France in North America. These loyalists, augmented by others who emigrated into Canada in later years until they totaled about 40,000, influenced the political organization of that colony and created a broad basis for later emigration. On the other hand, from 6000 to 8000 Frenchmen in Canada who declined to take the oath of allegiance were deported in 1755 to the southern British colonies.

Individual Germans who had emigrated to Virginia beginning in 1608, to New Amsterdam beginning in 1623 and to the Swedish colonies beginning in 1637 were followed in the last decades of the seventeenth century by organized groups of settlers. The emigration of Germans and German Swiss to America mounted in the eighteenth century, while the emigration from France and Holland and other countries remained negligible and German emigration to other than British colonies was insignificant. After the poor harvests of 1708 and 1709 in Germany the first extensive emigration movement occurred from the Palatinate and the Rhineland. Encouraged by the British government, which paid their traveling expenses, 13,000 to 15,000 of these emigrants landed in England en route to America; because of lack of transportation facilities the majority were forced to remain in improvised camps in London, where between 4000 and 5000 perished, and only about 3000 could be transported to New York; those who arrived in New York were soon obliged to migrate to Pennsylvania because of the hostile treatment accorded them by Governor Hunter. In 1693, 600 Swiss Palatinates

emigrated to Carolina and, in 1710, 5000 Swiss emigrated to North America. The Quaker William Penn, to whom the British crown had granted a large domain in 1682, persuaded Quakers in western Germany to send groups of emigrants to Pennsylvania; because it offered religious, economic and political freedom this colony remained during the eighteenth century the chief center of settlement for the German immigrants, including many Mennonites, who numbered there between 6000 and 7000 in 1719, Schwenckfeldians, who first came in 1734, and Herrnhuter, who began to come in 1740. Poll taxes levied on immigrants in Pennsylvania in 1729 were revoked when the immigrants began increasingly to settle in New Jersey and in the Carolinas. Incomplete data obtained from the city records of Philadelphia reveal that about 70,000 Germans and a small number of Swiss, Dutch, French and other nationals entered there between 1727 and 1775. The immigration of poor Germans was furthered by agents and by captains, especially of Dutch ships, who granted loans to cover transportation expenses; the redemptioners who failed to repay the loan shortly after landing could be sold in the open market for a period of three or four years. The number of Germans in 1750 in Pennsylvania totaled about 80,000. German emigrants, mainly Protestants, from the Palatinate, the upper Rhine and Württemberg, had their passage paid to Nova Scotia by the British government; in 1767 of the 13,374 inhabitants of that colony 1946 were aliens, mostly Germans. According to the emigration archives of the French Colonial Ministry the latter also settled in large numbers in the French colonies; 528 were transplanted to Louisiana between 1720 and 1721, and 5000 to Cayenne in 1763-64. German intercontinental emigration from the beginning of colonization until the nineteenth century is estimated by Mönckmeier to have totaled about 200,000.

Emigration from Europe to the American continent would have assumed quite different proportions had the slave trade been prohibited or restricted from the beginning. Negro slaves were imported early in the colonial period for hard labor in mines and on tropical plantations. Columbus is said to have brought Negro slaves from the west coast of Africa. In 1517 Spain declared the slave trade a state monopoly, but since it had no colonies in Africa it merely controlled the importation of slaves to America.

The most important of the foreign *asientos* (*q.v.*) was that granted to Great Britain by the

Treaty of Utrecht in 1713 on the basis of which the British South Sea Company obtained the right to deliver 4800 slaves annually over a period of thirty years to the Spanish West Indies; since this number was insufficient for the needs of America, there developed an illicit slave trade on a large scale. The slaves were brutally treated during transportation and in the course of their labor. The rate of mortality during the journey was enormous at all times and their natural increase was small because of the conditions under which they lived and the small number of women among them; the demand for new slave shipments was therefore continuous and large. Between 1680 and 1786 about 2,130,000 Negroes were brought to North America and to the British West Indies. The total number of Negroes imported annually toward the end of the eighteenth century by England, France, Holland, Denmark and Portugal totaled approximately 100,000. The peak of the Negro slave trade was reached at the end of the eighteenth century and the beginning of the nineteenth, the period after the introduction of the cotton gin; according to the statistics of the port of Havana about 225,000 Negroes were landed between 1790 and 1820. In Brazil as late as 1840 slaves, mostly of African origin, were landed by forty-five vessels, each with a capacity of between 300 and 400 persons. It is probable that in the course of the three and a half centuries preceding 1888 there were brought from Africa about 20,000,000 Negroes, most of whom were imported to the tropical and subtropical colonies.

Modern mass migration, a voluntary movement of free wage earners, tenants and small farmers, began in Great Britain with the industrial revolution in the second half of the eighteenth century and lasted until the World War. The early part of this period, preceding 1850, must be distinguished from the later part, which was marked by revolutionary changes in transportation and by the rapid technical development of large scale industry. The Napoleonic wars and the economic crisis at the beginning of the nineteenth century tremendously increased the intercontinental migrations until they surpassed in extent the continental migrations which had predominated in Europe until 1820. During the entire century these migrations helped to solve the problems of unemployment and overpopulation and at the same time functioned as a political safety valve.

In the first half of the nineteenth century con-

ditions in the countries of both emigration and immigration were extremely favorable for an increase of the number of immigrants. Emigration was necessitated by the miserable plight of the urban masses following the industrial revolution and by the desperate condition of the rural surplus population, aggravated by agricultural crises; it was encouraged by the extension of the settlements in the United States beyond the Appalachian range and the rapid development of industry, which required free labor. From 1870 to 1890 free or cheap land gave the proletarian immigrant of farm origin some assurance against the insecurity of cyclical unemployment in industry; and cheap passage due to improved ocean transportation made it easier for the emigrant to return to his native country in times of crisis. Next to the United States British colonial possessions attracted the largest number of immigrants; the territories which remained in the hands of the other colonial powers had no particular importance from the point of view of migration until the middle of the century.

Public regulation of emigration and immigration was more lax during this century than ever before, largely because the governments found the spontaneous migratory movements to be in accord with national interests as they conceived them. A species of police licensing of individual emigrants which prevailed in Europe until the middle of the century was gradually abandoned because of its ineffectiveness. The European countries transported a great number of convicts and paupers to the colonies; between 1787 and 1867, 160,663 convicts were shipped to Australia from the British Isles; until 1840 in fact the number of convicts sent to Australia exceeded the number of free immigrants. In periods of crises Great Britain, Germany, Switzerland and Sweden subsidized the emigration of unemployed, paupers and vagrants. From 1819 to 1827 the British government made five appropriations for the support of emigration and by the Poor Law Amendment Act of 1834 local bodies were permitted to provide financial assistance for emigration, a power which was used extensively especially during the potato famine of 1846-47. The countries of immigration, on the other hand, did not as a rule subsidize immigration although they placed their natural resources at the disposal of the immigrants; some South American countries, however, paid the transportation expenses of the settlers (*see* EMIGRATION; IMMIGRATION).

According to American authorities immigration to the United States between 1790 and 1820 totaled approximately 250,000, a figure which appears to be excessive. Emigration to the United States from the British Isles was extensive even during the Napoleonic wars; but mass emigration from continental Europe, largely from Germany, did not begin until 1816, when it amounted to from 15,000 to 20,000. In the following years there were relatively good harvests in Europe and a new emigration movement from the continent did not develop until 1828. The emigration from the British Isles at this time fluctuated in accordance with changes in economic conditions; in 1832 for the first time it exceeded 100,000 persons. Before 1850 the United States received about one half of the emigrants of Great Britain and in a few years approximately two thirds. Between 1820 and 1840 on the average about 20,000 British emigrants went to Canada annually, and large numbers also emigrated to Australia and south Africa. The period from 1830 to 1850 was characterized by one of the greatest mass migrations. In Great Britain the poverty among the farmers and the mechanization of the textile industry provoked emigrations. Of the total emigration of 300,000 from the British Isles in 1849, 219,000 came from Ireland largely because of the potato famine of 1846-47. At least 2000 German soldiers and 5000 German colonists migrated within several years to Brazil, but in 1859 German immigration was prohibited by that country. In 1854 German emigration reached 240,000, of which 215,000 went to the United States. The discovery of gold in California increased emigration from France and the Scandinavian countries; some Swiss and Italians were also among the immigrants of this period. Spain restricted emigration to America until 1850. Emigration from the Latin countries to north Africa, particularly to Algeria, began in 1830.

Between 1776 and 1840 approximately 1,000,000 immigrants arrived in the United States and 9,500,000 from 1840 to 1880, of which about 90 percent came from Europe. After 1880 immigration increased to immense proportions until the World War. Between 1850 and 1914 the attraction exercised by the oversea countries was the decisive factor in determining the extent of immigration. In the United States the poor harvest of 1854, the economic crisis of 1857 and the Civil War brought about a decline in immigration, which later increased considerably as a result of the homestead laws, the construction of

railroads and the development of large scale industry. Between 1866 and 1870 the average annual emigration from Europe was 346,000; between 1871 and 1875 it was 372,000 and between 1876 and 1880, 283,000. During the three subsequent five-year periods it rose to 686,000, 779,000 and 729,000 respectively.

The period following 1860 marked the beginning of appreciable emigration from southeastern Europe. The growing industrialization of northwestern Europe reduced its importance as a source of labor power not only for the United States but also for South America, Canada, Australia and south Africa, while the constantly expanding westward settlement in the United States provoked an acute crisis in the agricultural southeastern part of Europe in the 1880's. The introduction of compulsory military service, political unrest, the extension of railroads, the improvement in ocean travel and reduction of its cost also contributed to the growth of southeastern European emigration. While in 1880 about 50 percent of the immigrants to the United States from European countries had come from the British Isles and 20 percent from Germany, in the period between 1890 and 1914 two thirds were of southeastern European stock. Between 1896 and 1899 Italy led as an emigration country; in five years between 1900 and 1910 the lead was taken by Austria-Hungary, but Italy resumed her former position in 1911 and from 1913 to 1915. The average annual immigration to the United States from 1901 to 1905 was 764,000; between 1906 and 1910, 949,000; between 1911 and 1915, 805,000; and between 1921 and 1924, 426,000. Many of the new immigrants did not plan permanent settlement; they were rather prompted by the desire to acquire a sum sufficient to purchase a small farm in their native land. Beginning with 1870 countermigration assumed ever increasing proportions, facilitated by the reduced cost of transportation; its extent was determined chiefly by economic conditions in the United States.

After the abolition of slavery in the British colonies the great demand for labor in the tropical and semitropical regions was met to a large extent by the importation of contracted Indian and Chinese coolie laborers, who supplemented the free Negro labor. The intercontinental migration of Indian workers, most of them under three to five-year contracts, reached its peak in 1858, when it totaled approximately 46,000. The French West Indies prohibited this type of indentured migration in 1884 and by 1916 it was

prohibited in all British colonies. It declined to a total of only 12,000 in 1912 and 1913 and to only 221 between 1919 and 1920. The recruiting of indentured Chinese laborers for work overseas began in the 1850's; the European powers have since continually ignored the repeated prohibitions of emigration by the Chinese government. Conditions of coolie transportation have been such that the mortality rate during passage has reached 20 percent. Between 1904 and 1910, 170,000 Chinese were brought to the Transvaal to work in the mines, but most of them eventually had to return to China. During the World War 100,000 Chinese coolies were imported by England and 37,000 by France; they too were returned to their native country. The intercontinental emigration of Chinese has stopped almost completely as a result of restrictive laws. While the total number of Chinese abroad, many of them petty merchants, totaled in 1922 about 8,200,000, their number outside of Asia is small: Cuba 90,000, continental United States 60,000, Peru 45,000, Australia 35,000, the Hawaiian Islands 24,000 and Canada 12,000. Japanese emigration, which first began in the 1880's to Hawaii and soon thereafter to the United States, Canada and Australia, was also terminated by restrictive laws in the countries of immigration; Brazil still offers an overseas outlet for Japanese emigrants (*see* ORIENTAL IMMIGRATION).

Laws to curb immigration which were passed in the United States in 1917, 1921 and 1924 reduced the annual number of alien immigrants to 180,000 in 1930. More stringent administrative regulation of immigration was also undertaken by South American countries. In 1922 Great Britain assumed the responsibility of subsidizing by agreements with the dominion governments the colonization of British subjects in its dominions. As a result of this policy, which was designed primarily to make possible the transplantation of agriculturists, 370,000 persons were assisted to emigrate between 1922 and 1930. The British dominions have recently, however, restricted immigration; even Canada has suspended its policy of giving free land to settlers. Immigration to Australia, which had averaged 95,000 annually between 1921 and 1924, shrank in 1931 to 8000.

In recent years of the enormous masses of unemployed workers in Europe only from 250,000 to 300,000 have emigrated overseas annually, whereas in pre-war years the number of inter-

continental emigrants from Europe had totaled more than a million annually. Emigration from Italy, which from 1906 to 1910 had amounted to 402,000 annually, was reduced in 1930 to about 60,000; in Spain, where from 1911 to 1915 the annual average had been 166,000, it was reduced to 50,000. Since 1930 emigration has declined further as a result of general restrictive measures; during 1931-32 the number of alien emigrants from the United States was about 68,000 larger than the number of incoming alien immigrants. In the decade from 1920 to 1930 there was also a considerable exodus of American citizens to European and South American countries, to Asia and to Canada; most of the 520,000 Americans who settled abroad between 1918 and 1930 did so for business reasons and represent the personnel carrying out American economic expansion. In 1931 there began an important emigration of American and European skilled workers to the Soviet Union.

Intercontinental migration throughout the world between 1800 and 1924 totaled approximately 60,000,000, of which 36,000,000 went to the United States between 1820 and 1924; about 10,000,000 of the latter subsequently returned to Europe. According to official immigration statistics the following countries received over 500,000 immigrants:

COUNTRY	PERIOD	IMMIGRATION (In 1000)
United States	1821-1924	33,188
Argentina	1857-1924	5,486
Canada	1821-1924	4,520
Brazil	1821-1924	3,855
British West Indies	1836-1924	1,477
Cuba	1901-1924	766

According to official emigration statistics the countries which between 1846 and 1924 supplied over 1,000,000 immigrants to oversea territories were:

COUNTRY	EMIGRATION (In 1000)
United Kingdom	16,974
Italy	9,474
Austria-Hungary	4,878
Germany	4,533
Spain	4,314
Russia	2,253
Portugal	1,633
Sweden	1,145

Between 1800 and 1930 the population of Europe rose from 180,000,000 to 480,000,000 and the number of persons of European stock in the oversea countries reached 160,000,000.

Continental International Migrations. Continental migrations until the nineteenth century were with few exceptions group rather than individual migrations. Before the fifteenth and sixteenth centuries the migrations were largely the result of agreements between governments which accorded to invited alien groups special political and legal status. During the fifteenth and sixteenth centuries, mass migrations of refugees were provoked by religious and political conflict (see MASS EXPULSION). The revocation of the Edict of Nantes in 1685 caused the emigration of 250,000 to 300,000 Huguenots from France, largely to other European countries. Those who took part in these continental migrations were chiefly artisans and merchants. The governments vainly issued prohibitions against emigration; the reissuing of bans in 1669, 1685 and 1705 give evidence of the failure of attempts to check the movement. Migration connected with military recruiting assumed importance beginning with the sixteenth century; thus the number of Swiss mercenaries recruited by foreign powers under the authority of military capitulations has been estimated to have been as high as 80,000 in the eighteenth century.

In the seventeenth century Prussian rulers undertook large scale colonization projects for the first time in history. The Great Elector tried to remedy the loss of population caused by the Thirty Years' War through the importation of Dutch, Frisian and Swiss immigrants. The example of Frederick the Great, who colonized approximately 250,000 settlers, was followed by the Hapsburgs, who tried to colonize the devastated regions in Hungary and Galicia by a systematic importation of settlers from Germany, Alsace, Switzerland and Italy. Maria Theresa settled 50,000 between 1765 and 1770, and Joseph II colonized 38,000 from 1783 to 1788. In Hungary the colonization period extended from 1801 to 1840. In 1767 about 6000 persons were illicitly brought from Germany by Colonel Thürriegel to the inhospitable regions of Sierra Morena in Spain. The attempt of Catherine of Russia in 1763 to attract to the Volga regions peasants from southern and middle Germany by offering them favorable conditions was terminated in 1769 when such emigration was prohibited by German authorities. In the preceding six years more than 30,000 had settled in the region, a number which increased to 75,000 by the end of Catherine's reign. A large scale emigration from Germany, in which Mennonites were the first participants, also took place be-

tween 1783 and 1790 to southern regions in European Russia (provinces of Ekaterinoslav, Kherson and Taurida). Emigration from southwestern Germany by way of the Danube to these regions was important from 1804 and was further stimulated by Alexander I's edict of 1808. Later German immigrants settled also in Bessarabia. During the nineteenth century large groups of emigrants left the German settlements on the Volga for other regions of Russia—the Don territory, Crimea, northern Caucasus and Siberia—as well as for the United States and Canada. Emigration of Mennonites from Russia was provoked by the abolition in 1871 of the special status which they had hitherto enjoyed. The movement of German peasants into Poland which started at the beginning of the sixteenth century was impressive from 1809 onward largely as a result of the efforts of Alexander I. Between 1814 and 1830 many German artisans and laborers migrated to newly established industrial cities of Poland. In 1863 there were 260,000 Germans in Russian Poland, and their number was continually increased by immigration throughout the century. By 1867 a large number of skilled workers had emigrated from Germany to Hungary, and there was later emigration to those Balkan states which encouraged industrial development.

Emigration of skilled labor from the advanced European countries to the more backward was followed in the last third of the nineteenth century by the migration of unskilled labor in the opposite direction. In the 1880's there began a migration of seasonal workers from Russia and Galicia to meet the increasing labor needs of German agriculture; from 1910 to 1913 such migrations from Russia totaled yearly, according to Russian data, from 600,000 to 850,000. In 1907 France began to recruit seasonal agricultural laborers on a large scale; by the outbreak of the World War it was importing about 90,000 annually besides 30,000 workers coming daily from Belgium. The migration of Polish miners from Westphalia to the west, which began about the same time, mounted after the war. Beginning in the 1870's Italy supplied Germany and France with a large number of agricultural and industrial workers; until the beginning of the World War these totaled 250,000 annually, one quarter going to Germany and one quarter to France. The emigration to England of Polish and Russian Jews from 1880 to 1910, which represented a movement caused largely by persecutions, appears never to have exceeded 60,000 to 80,000

persons annually, many of whom were in transit to the United States.

The World War turned continental migrations into new channels. Even after the gigantic exchange of population groups among the various states—the return of millions of war prisoners and the repatriation of 9,500,000 refugees, optants and resident aliens—the political boundaries of the old and the newly created states still failed to correspond with the ethnic boundaries. As a direct result of the peace treaties fourteen new states were created in Europe and frontiers increased pronouncedly; consequently what were formerly intranational migrations became in some cases international migrations and vice versa. Customary migrations were restricted for political reasons and by industrial protectionism, which was stimulated in some measure by the increasing cost of unemployment relief and by the agricultural crisis. Agrarian reforms and social legislation tended on the whole to retard the mobility of population; but in some cases, as in certain east European countries, the failure of reforms provided an additional stimulus for emigration. At the same time the countries of immigration in Europe as well as in America restricted the influx of outsiders for nationalist and racial as much as for economic reasons.

The most important immigration countries in Europe during the post-war period were France and Germany. France experienced a rapid economic growth, while its working population had been reduced by the death of 1,363,000 soldiers in the war, by its large number of disabled soldiers and by a low birth rate. It therefore encouraged the immigration of alien workers for permanent residence and naturalization. France has taken the lead in regulating immigration of workers by treaty; the earlier steps in this direction were made during the war, when it had obtained workers from the Allies for the manufacture of munitions and had also engaged a large number of workers from China and north Africa. After the war foreign workers were engaged in several emigration countries through government immigration agencies and international migration treaties were made with Poland, Italy, Czechoslovakia and Belgium. Between 1920 and 1930 France received approximately 1,147,000 foreign industrial workers and 760,000 foreign agricultural workers; about one third to one half of the immigrants were seasonal workers. The number of foreigners in France rose from 1,133,000 in 1911 to 3,300,000 in 1931, when immigration declined to slightly over

100,000 and the number of persons returning to their native countries is estimated to have been 200,000. According to the statistics of the Ministry of Agriculture for 1927 almost one third of the 1,600,000 foreigners gainfully employed in France were Italians; and Poles, Belgians and Spaniards were also numerous. The percentage distribution of the 1929 immigrants by nationality was as follows: Poles 31, Italians 19, Belgians 14, Spaniards 10, Portuguese 7, Czechoslovaks 4.7, Jugoslavs 4.5, Germans 4.5, Russians 1.7; Austrians, Swiss and Greek Armenians were also present in small numbers. While immigration has aided French industry, it has failed to satisfy the agricultural needs of the country; vast areas have remained uncultivated since the war and the yield per hectare has also diminished.

The immigration of alien agricultural workers and of other foreigners to Germany has been drastically limited since 1927. Alien seasonal workers, between 60 and 70 percent of them women, were still employed, although in diminishing numbers, on the sugar plantations and in the cultivation of potatoes. A pact between Germany and Poland in 1927 provided that Polish agricultural workers who arrived in Germany between 1919 and 1925 were to be progressively repatriated. The number of resident alien workers in German industry, which before the World War had totaled from 550,000 to 600,000, had shrunk to 134,000 by 1930. In 1928 and 1929 Germany also concluded special migration treaties with Czechoslovakia, Jugoslavia and Austria.

The problems involved in international migration in Europe during the post-war period were no longer confined to the shifting of labor power from one nation to another. They included such political questions as the right of temporary workers to choose their citizenship and to be instructed in their mother tongue, which questions have constituted the principal issues between the countries of emigration and of immigration and have complicated the problems of the older minorities. For certain countries of central Europe these and other issues were settled by bilateral treaties regulating migration; these treaties have not improved the general situation, however, because they do not usually involve neighboring states and because they often discriminate against third parties. An attempt was made to solve the problem of minorities in the Balkans by an exchange of over 1,125,000 Greeks for 360,000 Turks and

of thousands of Greeks for Bulgarians, carried out under the supervision and with the financial assistance of the League of Nations. The latter also directed the migrations, employment and settlement of Russian and Armenian refugees.

After the war continental movements of population in the Americas, in Asia and in Africa became unusually active. The adoption of immigration policies discriminating against Europeans led to an increase in the number of immigrants to the United States from Canada and Mexico as well as from Porto Rico and from the Philippine Islands. The recorded continental immigration from British North America and Mexico, which averaged 62,700 annually from 1908 to 1910, rose to 264,000 by 1923; during this period illegal immigration was also large. Mexican and Canadian immigration, however, shrank to 80,000 in 1929-30 and as a result of the increased stringency of the restrictions it declined further in 1931. According to incomplete statistics Mexican alien immigration dwindled from 40,000 in 1929 to 12,000 in 1930, while the counter migration for these years amounted to 7195 and 6300. Mexicans in the United States, who in 1932 totaled approximately 1,000,000, have been chiefly seasonal workers employed on sugar plantations, on cotton farms and in other agricultural labor. The annual average of Philippine immigration between 1920 and 1929 was from 8000 to 10,000, with a counter migration of about 3000. Little reliable information is available on continental migrations in South America; it is clear, however, that the decline of European immigration stimulated migration from the interior to the economically more advanced coastal regions.

In Asia the chief countries of emigration are China, India and Japan; and the most important immigration countries Manchuria, British Malaya, Ceylon, Indo-China, the Dutch Indies and Siam. While the traditional emigration persists from the three overpopulated provinces of south China to southern Asia, an ever increasing number of agricultural workers, reaching over 1,000,000 in recent years, has been migrating to Manchuria from the three northeastern provinces, particularly from overpopulated Shantung, since 1910. Since 1927 about half of these migratory laborers have remained in Manchuria for permanent settlement. Chinese immigration is also large in British Malaya; according to the statistics of the Straits Settlements it totaled 90,000 in 1881, 278,000 in 1913 and 359,000 in 1927, when the counter migration involved 155,000.

Because of the local economic crisis this immigration has declined since 1929; in 1930 it was partly prohibited. An extensive emigration of Chinese was directed toward Siam and the Dutch East Indies; in 1922 approximately 40,000 persons emigrated to the latter territory. In addition to the Chinese, Indians were the principal immigrants to British Malaya, but Malaysians of the Sunda group, Arabians, Armenians and Jews were also included. The number of immigrants from southern India arriving in Penang dwindled from 156,000 in 1927 to 63,000 in 1928; in 1930, 78,000 repatriated. There also took place an important Indian emigration to Ceylon, where the number of immigrants rose from 208,000 in 1926 to 238,000 in 1929.

Japan has not succeeded in stimulating emigration to other Asiatic countries. The number of Japanese abroad in 1928 was only 710,000, of whom 292,000 were in Asia. Japan's plan to settle 1,000,000 colonists in Manchuria between 1908 and 1918 had led by 1923 to the colonization of only 200,000 persons, of whom one half were farmers; it is estimated that during the same period 800,000 Koreans migrated to Manchuria. Of the more than 1,000,000 Korean laborers who entered Japan by way of Fusan between 1917 and 1929 approximately 800,000 returned to Korea. Filipinos have settled in Hawaii since the prohibition of the immigration of Chinese and Japanese; in former years many Portuguese migrated to the islands.

In Africa continental migrations have been extensive. The modern development of industry and agriculture and the construction of public works in certain provinces have required the labor of a large number of natives who are recruited from other provinces by commercial agencies. For a number of years the Witwatersrand Association has been obtaining annually approximately 80,000 temporary laborers from Mozambique and the British colonies for the mines of the Transvaal. The Native Labor Corporation in South Africa imports laborers from Basutoland, whose annual emigration averaged 70,000 between 1920 and 1924, and from Nyasaland and Swaziland. The South Rhodesia Labor Bureau and the Bureau de Travail in the Belgian Congo are also responsible for the migration of thousands. There are likewise population movements between the French colonies of the African west coast, the Spanish islands and adjacent foreign territories. Measures for the protection of the natives enacted after the war by the mandatory powers have influenced the extent and

character of African migrations and have resulted in the importation of Chinese workers in some cases.

Intranational Migrations. Population movements to the frontier in the United States were significant intranational migrations. After 1763 Scotch-Irish farmers pushed the frontier beyond the Atlantic coast settlements, so that by about 1800 the Missouri prairies and after the purchase of Louisiana in 1803 the lower Mississippi valley were populated. Even before the gold rush the great western migration had brought to the western territories a larger population than had been attained by the original thirteen colonies in more than a hundred years. The discovery of the gold fields caused the population of California to increase from 92,000 in 1850 to 380,000 in 1860. The gold and silver fields that were discovered later in the west also attracted great numbers of immigrants. Gold miners, the most mobile element in the population, were the first to move to British Columbia and Alaska when new gold fields were discovered. The homestead law furthered the settlement of the western states as did also the ever increasing demand for agricultural products. The last frontier in the west disappeared toward the end of the nineteenth century.

Some migrations within America have been impelled by religious motives. Beginning in 1839, 12,000 to 15,000 Mormons migrated to Illinois and between 1846 and 1851 about 12,000 migrated to Utah. The Mennonites, who founded colonies in New Jersey and Pennsylvania in the seventeenth century, were also often obliged to continue their migrations because of persecutions.

The railroads, the increasing urbanization and industrialization of the United States and the development of boom towns were largely responsible for the shifting movements of the populations. Accurate statistics on the intranational migrations in the United States are not available; it is known, however, that American workers are far more mobile than the European. For many years the agricultural population in the United States decreased from 600,000 to 1,000,000 annually. The seasonal demand for labor in the wheat belt of the middle west, in the fruit growing and truck gardening regions of the Pacific coast and in the cotton belt has caused huge seasonal migrations; the introduction of labor saving machinery, however, has caused a considerable decline in the demand for these workers. The rise of new industries as well

as the shifting location of older industries caused the migration of masses of industrial workers; many cities doubled their populations during the World War and new cities arose. The automobile industry with its fluctuations in employment has stimulated prodigious migrations to the Detroit region. Similar phenomena are also present in the oil industry, in the lumber industry, in the metal mine areas and in the coal mine regions of Pennsylvania and West Virginia.

Since the World War the mobility of the Negroes has become greater than that of the whites. Negro migration from southern to northern states between 1910 and 1920 was five times as extensive as the average decennial Negro migration from 1870 to 1910. Masses of Negroes left the south especially from 1916 to 1918, chiefly for the larger cities in the north. During the depression of 1921 many Negroes drifted back to the south, a large number to return to the north in the succeeding years. The rapid urbanization of the Negroes is evident from the fact that in 1890 only 19.8 percent of the Negro population of the United States lived in the cities while 43.7 percent were city dwellers in 1930. Negroes have also participated in the seasonal migration between the northern and the southern states; Negro migration toward the west and from farm to farm in the south has likewise increased.

Migrations in Europe between farm and city grew immensely after the abolition of serfdom. The number of persons engaged in agriculture in Germany decreased between 1882 and 1925 from over 40 percent of the total number of gainfully employed to 23 percent. The post-war crisis in agriculture further stimulated the migration from rural to urban areas. Between 1924 and 1929 about 894,000 people came from the country to the cities with over 50,000 inhabitants; of this number about 790,000 migrated to the large cities with over 1,000,000 inhabitants. The striking migration to urban centers is revealed in the following percentages, which represent the proportion of those born in certain large cities to the total population of the cities: Bombay, 16 (1921); Paris, 36.6 (1921); Budapest, 38.4 (1925); Berlin, 40.7 (1910); Rio de Janeiro, 52.4 (1920); Vienna, 53.8 (1923); London, 69.4 (1911). The rural exodus assumed such large dimensions between 1920 and 1930 that in some countries certain agricultural regions have been depopulated. This led in France to state subsidized migration of large numbers of farmers from northern to southern regions,

in addition to the importation of foreign settlers. The migration from country to city has likewise been significant in Argentina and Canada and in the Union of South Africa.

In numerous countries all over the world, as a result of the economic crisis beginning in 1929, the unemployed have returned by the thousands to their native villages wherever the traditional ties to the land are still strong. In 1930 about 200,000 laborers found work on the land in Germany, and statistics reveal a movement away from the middle and large sized cities for the first time.

Migrations within the Soviet Union have been especially significant because of the social and economic transformations that have taken place. Before the revolution migration to Asiatic Russia from European Russia had been large; between 1801 and 1914 more than 7,000,000 persons had so migrated, many of whom had returned. The vast industrialization projects undertaken by the Soviet Union, especially those since the inception of the Five-Year Plan, have led to great population shifts to urban centers, to newly created cities, to newly established state operated farms (*soukhoi*) and to colonies set aside by the Soviet government for minority peoples. Following the collectivization of agriculture the movement of the peasants to the cities, which was already large, increased and will probably continue to do so as industrialization progresses.

IMRE FERENCZI

See: EMIGRATION; IMMIGRATION; ORIENTAL IMMIGRATION; NOMADS; DEMOGRAPHY; MAN; POPULATION; ECOLOGY, HUMAN; GEOGRAPHY; CLIMATE; ACCLIMATIZATION; FAMINE; DISASTERS AND DISASTER RELIEF; RACE MIXTURE; AMALGAMATION; RACE CONFLICT; DIFFUSIONISM; ASSIMILATION, SOCIAL; MOBILITY, SOCIAL; ALIEN; ETHNIC COMMUNITIES; DEPORTATION AND EXPULSION OF ALIENS; MASS EXPULSION; NEGRO PROBLEM; SLAVE TRADE; PENAL TRANSPORTATION; IMPERIALISM; CONQUEST; COLONIES; EUROPEANIZATION; ISLAM; DIASPORA; LAND SETTLEMENT; FRONTIER; URBANIZATION; MIGRATORY LABOR; TRANSPORTATION.

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MIGRATORY LABOR. Greenland Eskimo follow the seal northward until the returning cold sends them back to their winter settlement; Swiss peasants drive their cattle to a high alp for the short lived summer pasture; an American hotel keeper moves his whole entourage back and forth between Palm Beach and the White

Mountains. Thus migratory work characterizes cultures of most varied degrees of complexity. "Rogues and vagabonds" also "are ancient blots on the history of mankind." This discussion, however, is confined to those wanderers who travel in search of wage labor; it excludes workers who serve for a term of years under indenture; and it is less concerned with those who swing a single circle of migration, like the tour of the mediaeval journeyman, than with more habitual migrants who go back and forth along somewhat regular paths in response to needs and opportunities that vary with the seasons. Even so the field is a broad one. The three essentials of the system—seasonal variations in the need for man power, a wage economy and workers who can be induced to migrate—are all to be found in most parts of the modern world.

Shortly after 1700 the English harvest, for example, began to draw thousands of laborers each year across the Irish Channel. During the middle of the following century there were certain English villages from which "the gang-master led out draggled troops of women and children" and a few men "to weed and pick stones and hoe," particularly where newly reclaimed farms were not yet furnished with cottages and needed extra labor for clearing. But these notorious "agricultural gangs" even at their height enrolled only some 10,000 to 15,000 workers and played a less significant part than the "spalpeen" labor from Ireland or the less noticed groups of English workers who tramped into the richer counties "armed with sickles and scythes." On the continent of Europe migratory labor has been of much greater importance and has often involved the crossing of national boundaries. As early as the fifteenth century Polish laborers known as *Sachsengänger* had begun seasonal migration into certain German regions. In the 1880's and 1890's the increasing scale of agriculture in eastern Prussia and the expulsion of some 40,000 Polish settlers intensified the demand for alien migratories. By 1890 they numbered over 17,000; in 1904 there were nearly 140,000 Poles and some 80,000 Galicians; and just before the World War the annual total of seasonal workers entering Germany was estimated as between three and four hundred thousand. Since the war economic conditions and governmental restrictions have lessened the movement and boundary changes have somewhat obscured it; but the quota of foreign migrants to be imported for work on the sugar beet in 1927 still stood as high as 100,000, of whom

the majority were women. France also has made use of considerable numbers of alien migratories. Belgians, Spaniards and Italians have for many decades entered the country "for harvest, vintage or beetlifting"; early in the century they were joined by Polish laborers; and, although post-war policy has shifted the emphasis to permanent settlement in mining and industrial as well as agricultural communities, the seasonal movement has continued and found new sources of supply in Czechoslovakia. The occurrence of strikes among woodcutters and *vignerons*, moreover, has called attention to the existence of numbers of native French migratories in many seasonal industries. There has also been extensive use of seasonal labor, often drawn from the proletariat of country villages, in the harvesting of the olive in southern Europe and of the grain crops of Lombardy and the Danube basin.

A still more spectacular current of migration has carried European workers back and forth across the Atlantic to the harvest fields of various parts of Latin America. Between 1907 and 1913 Argentina received some 60,000 workers a year from Italy and Spain; Brazil has taken migratories from Italy, Portugal and other countries; and Spanish seasonal workers have gone in large numbers back and forth to Cuba. Within the Americas a small but interesting group of expert sheepshearers find almost continuous employment by following a path along the backbone of two continents. In Australia and New Zealand also sheepshearing plays a large part in a sequence of outdoor occupations which gives a considerable portion of the laboring population a fairly full year of migratory work.

In South Africa, on the other hand, the native laborers, who do most of the work in the mines and other industries, more often come as successive relays than travel back and forth as true migratories. But the greater part of the 200,000 natives on the Rand mines are hired under nine-month contracts; and employment is markedly seasonal, not because of the needs of the industry but because it is not until the native harvest is nearly consumed that a large proportion of the men can be induced to leave the kraals for the mine compounds. A somewhat similar situation is common in India. Cotton ginning and other strictly seasonal industries employ some 250,000 workers; partly seasonal industries would add half as many more; but even in the remaining factories and in those which have been longest established a considerable number of workers leave for the crop year and many others work

only for one season or for a few years without losing their major connection with the soil. A part of the great migration of both Indian and Chinese workers to Malaysia is seasonal, and it is estimated that for the last fifteen years Manchuria has made annual use of some 200,000 of the Chinese laborers, whom their countrymen describe as the "spring come, autumn go" workers.

Many of these totals are thus considerable, but it nevertheless seems clear that the two greatest regions of migratory labor have been Russia and North America. Before the World War and the revolution the number of Russian peasants "who made periodic journeys away from their villages in search of waged work in agriculture and industry" was possibly 2,000,000 or 3,000,000 in the former category and 3,000,000 or 4,000,000 in the latter. It is said that sometimes two thirds of the population of an entire province would tramp off to seek work in the grain fields of the regions of larger properties and richer harvests; and apparently even greater armies of peasants, mainly men, worked seasonally or for short periods in the factories, the building trades and the coal mines. Indeed Prokopovich's studies of family budgets indicate that some 25 percent of the total income of the peasants of the black soil districts and as much as 40 or 50 percent in less fertile provinces was derived from sources outside their land, in which the earnings of the "factory nomads" and other migratories played an important part. Since the revolution, on the other hand, the redistribution of the land and the absorption of the poorer peasants in the collective farms have reduced this need for dependence upon "going-away work," at the same time that the destruction of the big estates and the limitations on the use of wage labor in agriculture have lessened the opportunities for such employment; and these factors together with the vigorous "campaign against the fluidity of labor" in industry seem to have prevented the reemergence of migratory work on anything like the pre-war scale.

It is apparently North America then which is now the leading field of migratory employment. The grain harvest, beginning in Texas and extending into the Canadian wheat fields, has typically required at least 250,000 transients. Parker estimated in 1915 that California employed no less than 150,000, many of them in fruit picking; between 20,000 and 30,000 do similar work in the middle Atlantic states; and the canneries of the country give brief employ-

ment to some 150,000 workers. Most of the 100,000 lumbermen in the Pacific northwest and many elsewhere should be classed as migratories; and the beet fields, the cotton fields, the construction camps and a score of other industries add their quotas to a total army of migrants conservatively estimated at 1,500,000 but often put at a much higher figure. For these diverse tasks labor is drawn from a great variety of sources. Canneries may rely upon the wives and children of wage earners established in the vicinity; beets and cotton and often the fruit and berry picking use family labor, now frequently Mexican, with large proportions of children; and "labor vacationists" from factory or college make brief excursions into the harvest fields. But the most distinctive part of this army has been made up of professional migratories or hobos—men and boys who follow only the transient occupations, whose characteristic mode of travel is the riding of freight trains, who have typically lost all home connections and "lie up" by the thousands for the winter months in the "flophouses" of Chicago and other cities, and who have often faced a "horstyle" world with the ironic defiance so conspicuous in the hobo cant and in the songs of the I.W.W. Since the war several factors have reduced the importance of this group. The use of the combine in the wheat harvest has effected a sharp cut in one of its most characteristic fields of employment. The cheap automobile and the tourist camp have made it easier for somewhat stabler workers and for whole families to reach the transient opportunities. And, finally, the last conspicuous addition to the force of migrants, the Mexicans whose numbers now reach into the hundred thousands, characteristically work and travel not as solos but in family groups. Yet even with these changes it remains true that no country has so many homeless men as the United States or relies on their services for so large a proportion of its labor.

The problems raised by this type of employment show many elements of similarity the world over. Although some workers are attracted to the life by its variety and irresponsibility and other groups have used the seasonal movements as a step toward permanent settlement in a more favored region, the great majority are forced into it by the dearth of stabler alternatives. Many are industrially incompetent or personally maladjusted, often they are strangers in a foreign country; and at best combined action among such shifting groups presents extraordinary dif-

ficulties. It is no wonder then that migratories are rarely able to command satisfactory working conditions. Although there are exceptional cases of relatively high wages, as among the organized shearers of Australia and New Zealand and a fraction of skilled workers among the American "fruit tramps," yearly earnings are characteristically very low; and except in the cases of organized recruiting the periods of enforced idleness are made longer by the time wasted in following misleading rumors of employment. Even more universal are the complaints regarding shelter and sanitation, and such widely separated instances as the provisions for straw mattress and rug in the Prussian contracts of the 1890's and Parker's description of the sanitary conditions of California hop fields in 1913 indicate the difficulty of securing suitable accommodations, which after all are to be used for only short periods in the year.

The social problems are no less conspicuous. If the movement is wholly masculine, as with the African Kaffir and the American hobo, it leads to social and sexual deprivations and abnormalities which are the more serious when, as in the latter case, most of the men have lost all permanent connections. But if, on the other hand, the migration is one of families, as with the Mexicans, it is likely to involve the scarcely more desirable alternatives of excessive child labor and the raising of children under circumstances in which education and a sense of security are almost impossible to attain. Employers also, however dependent they may be upon casual labor, often find it exasperatingly inefficient and undependable. Its discontent moreover frequently breaks out in bitter though ill sustained outbursts of revolt, such as those of the Industrial Workers of the World, and in many countries the wandering laborer has often turned into tramp or "sturdy beggar." For these reasons therefore the more settled elements in the community usually fear and despise the migratories.

It is this last viewpoint that was expressed in the earliest governmental efforts to deal with the problem. Both English and continental history show repeated attempts to abolish vagabondage, and modern vagrancy laws represent something of the same animus. Since the Gangs Act of 1868 and subsequent education laws corrected the worst abuses and prevented the employment of very young children in the English agricultural gangs, many governments have attempted to regulate conditions in the interest of the

migrants; California, for example, not only enforces certain standards of housing but also pursues the children of wandering families with special educational provisions. The crossing of frontiers has frequently occasioned state action, and such governmental recruiting as that begun by Prussia early in the century has often been effective in directing the movement and protecting workers from unscrupulous recruiters. Of the international agreements which have become important regulators of continental migration in Europe, those of Germany with Lithuania in 1923, with Poland in 1927, with Czechoslovakia in 1928 and with the Serb-Croat-Slovene Kingdom in the same year, of Austria with Poland in 1922 and with Czechoslovakia in 1925 and of France with Czechoslovakia in 1923 and 1926 make elaborate provisions for seasonal movements. Model contracts are set up to govern the terms of engagement, typically guaranteeing to the workers the same wages as those of natives in the same occupations, equal protection of the labor laws and at least some of the privileges of social insurance; and in each case recruiting and placement are the joint task of government exchanges in the two countries involved.

The argument for the extension of further protection to migratories is a very strong one, especially since there are few cases in which they are likely to repeat the achievement of Australian sheepshearers in building a powerful union on such a shifting foundation. The improvement of the labor market and the planning of sequences of employment are of particular importance. Certainly in the United States no task of greater urgency awaits an effective federal employment service than that of arranging for the guidance and transport of workers in response to seasonal needs. The most complete regulation, however, must leave many of the fundamental problems unsolved as long as migration continues in its present volume. Seasons and crop requirements are stubborn facts; if we did not have our existing supplies of migratories, it is hard to see how we could escape creating new ones. But even if the elimination of migratory labor seems quite impossible, the question may still be asked whether its use might not be greatly diminished either by reduction of the numbers of workers forced into the system or by provision of alternative ways of doing the seasonal work. It is clear that dislocations elsewhere in the economic world are often responsible for pushing redundant supplies of labor

into the migrant class. The depression which began in 1929 has added perhaps 200,000 youth to the American migratories; and occupational obsolescence, whether of feudal retainers or of machine operators, has at many periods forced its victims to join the armies of hobos and vagabonds. Evidently, then, anything which contributed to the permanent stabilization of industry would reduce the danger of these periodic additions to the supply. Moreover, where the need arises from the inability of the "dwarf peasant" to support himself on his own land, solutions have sometimes been found in larger holdings or in improved methods, and in many parts of the world cottage industries have long employed the peasants' winter and provided a significant but diminishing alternative to migration. In this sense, then, both Gandhi's attempt to revive the spinning wheel and the plans of industrialists like Henry Ford to locate factories in rural communities may be regarded as attempts to meet the same problem. Nor is it impossible to look for changes on the side of the demand for labor. Already the introduction of the combine in the wheat harvest has reduced one peak of employment; the mobile tractor columns of Soviet agriculture may be considered as in part a planned substitute for work once done by migrants; and there may be many other cases in which the directors of agriculture and industry could under sufficient pressure arrange, as the slave owner had to, for a year round sequence of tasks.

CARTER GOODRICH

See: CASUAL LABOR; CONTRACT LABOR; INDENTURE; AGRICULTURAL LABOR; MIGRATIONS; INDUSTRIAL WORKERS OF THE WORLD; CANNING INDUSTRY; FRUIT AND VEGETABLE INDUSTRIES; WOOD INDUSTRIES; UNEMPLOYMENT; EMPLOYMENT EXCHANGES; LODGING HOUSES; COMPANY TOWNS.

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MIKHAILOVSKY, NIKOLAI KONSTANTINOVICH (1842-1904), Russian sociologist and publicist. Mikhailovsky, the son of a petty nobleman, studied at a mining school but abandoned engineering for a literary career and became one of the most influential of the radical writers of his period. From 1879 to 1883 he was an active contributor to the illegal organ of the terrorist party, *Narodnaya volya* (People's will), but for the most part he expounded his ideas in the legal press despite the severe censorship. From 1869 to 1884 he was connected with the magazine *Otechestvenniya zapiski* (Memoirs of the fatherland), and from the early 1890's until his death he edited the monthly *Russkoe bogatstvo* (Russian fortune), in which he also ran a department called "Literature and life." Mikhailovsky was primarily an effective publicist, an acute literary critic emphasizing social values and a penetrating analyst of intellectual and social currents; his social philosophy, never presented systematically, is incorporated in his journalistic writings. Yet he is justly regarded as one of the founders of Russian subjective sociology; equally familiar with the natural and the social sciences, he arrived independently at a synthesis closely resembling the system of Lavrov, with whom he is grouped as a philosopher of Russian populism. In the history of Russian thought Mikhailovsky represented a trend toward social idealism away from the extreme materialism of Pisarev and the utilitarianism of Chernishevsky.

Mikhailovsky rejected Spencer's opinion that human society is an organism and criticized the

concept of collective consciousness on the ground that it was a mere metaphor. He believed that only individuals with their thoughts, feelings, volitions, are conscious; that different modes of social organization are determined by the nature of cooperation among men, by social division of labor in the field not only of economic but also of intellectual activity. He contended that there was a movement toward progress in history but regarded the objective method in sociology and objective truth in history as noxious illusions. Truth he defined pragmatically as a "saturation of our cognitive want"; he considered that the function of science was to serve man, to execute his theoretical and practical orders. Sociological research could therefore stop at objective analysis only in exceptional cases; side by side with desire for knowledge appears desire for moral judgment. Mikhailovsky's formula of progress, "the gradual approximation to the greatest possible division of labor between the organs of the individual and the smallest possible division of labor between men," sets as an objective a harmoniously developed individual, who because of technical division of labor can execute all types of work. The socialist ideal he believed would result from the "struggle for individuality." His intense stress on individuality led him to fight energetically against Marxism. Long before Tarde, Mikhailovsky studied the phenomena of suggestion and imitation in animal and human societies and investigated the conditions of the influence of great men on the crowd.

NICHOLAS S. RUSANOV

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MILITARISM in its broadest sense may be defined as an attitude toward public affairs which conceives war and the preparation for war

as the chief instruments of foreign policy and the highest form of public service. Regarding military service as ennobling both the person who serves and his community, it glorifies personal courage, the adventurous spirit, loyalty to a person or cause and bodily strength and endurance. Militarism of this type, rigidly disciplinarian and hierarchic in its methods, thrives in simple or traditionalist groups where only the more primitive forms of excellence and the least developed kinds of authority are understood. It represents the outlook of an "upper" social class which is unaware of its economic dependence and therefore normally implies a disdain of industry, trade and commerce as occupations. It is mythological and religious in its expressions—using ceremonies, decorations, titles and symbols—and is weakest when it is constrained to explain itself. It exists in all armed forces, for it is an essential feature of preparation for war. Defined in such extreme terms militarism is not widely prevalent at the present day, being found only in limited groups or at moments of national crisis. But the traditional idea that war is in "the nature of things" still survives, especially at periods of diplomatic tension, when the masses of the population fall easy victims to the warnings of professional militarist groups. In this more limited sense militarism may be conceived as the spark which sets off the tinder of accumulated ignorance.

The psychological origins of militarism are explained by the survival of types of reaction natural to primitive social conditions. In simple forms of society the frontier of civilized life is the wilderness, the desert or the forest. The civilized community faces inward, but it fears what may be at its back. Against unknown dangers outside, two movements are reasonable—first, defense and, second, adventure pressing forward the gains of civilization over the wilderness. Nearly all the older governments have come into existence as isolated oases of order in a surrounding chaos of emptiness; and therefore the traditional attitude toward what is alien, foreign or outside the frontier is that of defense against barbarism. Anyone who does not speak one's own language or follow one's own customs is regarded as a barbarian; and each of two civilized groups can therefore regard the other as barbaric. Such groups, however, are scarcely in contact so long as the intervening wilderness remains. The ancient Roman Empire and the ancient Chinese Empire were coexistent, but almost in separate worlds. In early times, when

the frontier was a limit to civilized order, military virtues developed—personal courage in defense of a community, obedience to authority and adventurousness in the face of danger.

The primitive attitude toward what lies beyond the frontier survives even in our own time. As civilization advances, however, the frontiers of all of its centers are pushed back until they meet; there is then no more wilderness dividing the jurisdictions of separate governments. But the forms of language, of custom and of social institutions continue to differ, because they have grown outward from diverse centers; and what is really another kind of "order" outside the frontier is treated, by those within it, as barbarism. Defense is then no longer defense of civilization itself but defense of one kind of civilization against another; and the hostile attitude toward what is foreign becomes fiercer, not more reasonable, when what is foreign is no longer obviously weaker. The Germans and the French fear each other much more than the Romans or the Chinese feared the outer barbarians of the past. Militarism emerges when the original source of the military virtues no longer exists. The defense of civilization, instead of dying down when frontiers touch, blazes up higher, as it becomes more artificial. It is assumed that the frontier is still endangered by outer barbarians who are "aggressive," although these so-called barbarians are likewise "civilized" and are armed also chiefly in "self-defense."

War is planned far in advance and many years are spent in preparation for a contest. Under a highly professionalized system of this kind the conception that war is ennobling tends inevitably to give way to the conception that it is inevitable; and the modern militarist usually maintains that his activities are entirely for the sake of peace. The ancient habits are maintained when the original reasons for their existence have disappeared; but a new rhetoric and a new mythology are quickly evolved to rationalize vestigial instincts. As personal loyalty to a sovereign decays, defense of the nation takes its place; the "will of God" is replaced by the hypothesis of natural selection through war.

But as war comes to be organized by skilfully prepared professional opponents, it becomes progressively more expensive. Industry and science are drawn into the preparation program. Munitions industries take the place of the armorers' guilds of the Middle Ages, but the scale on which they supply the needs of armed forces

gives them a much greater influence. Officers of the army, navy and air forces must be in contact with various types of industrial groups—not only those which provide the mechanical material of war, such as guns, explosives, tanks, chemical poisons—but also those which supply such necessary incidentals as petroleum, oil, clothing, food. Although the general public cannot be absolved from a very large share of ultimate responsibility, the patriotism of the armed forces is nourished more immediately by the activities of industrial corporations and syndicates operating on an international scale. An officer of high rank is useful on retirement as a director of an armament firm. Ex-officers are employed as agents of munitions companies for selling guns, tanks and bombing airplanes to nations which do not manufacture such goods; and by inducing one nation to buy arms, the agent can increase the market also in neighboring nations. As the armaments trade is partly international, whichever side wins the race, shareholders on both sides gain money. Moreover newspapers are frequently owned outright by armament firms; while in many important journals military correspondents are accorded a position above that of writers on business or the arts.

The influence of militarist groups on foreign policy is also secured through naval and military attachés, some of whom assist the sale of armaments abroad, search out military secrets and communicate with the war departments independently of the ambassadors to whom they are nominally subordinate. In most systems of government there is also a small general staff which has much more influence upon cabinets than any non-military group. Thus the admiration for war or at least the assumption that it is inevitable or likely—the spirit of militarism—exerts a continuous pressure upon public policy behind the scenes.

The timeworn rhetoric of militarism—punctuated with unrealistic presuppositions regarding the ineradicable pugnacity of man, the biological value of natural selection through war, the responsibilities of citizenship, the nobility of self-sacrifice in defense of fatherland, the cultivation of Spartan virtues—has lost much of its effectiveness in concealing the deeper lying vested interests in whose behalf it is employed. The military caste in every nation is part of the social class in control of public affairs; and nearly all existing communities today are traditionalist in their social standards.

Those in control are honored. The desire to control other men, as instruments or inferiors, is much stronger and more widespread than the desire to attack "enemies" or foreigners; and the authoritarian military structure serves to canalize this desire for domination. The sense of superiority is enjoyed by all ranks in armed forces above the rank and file; and the actual exercise of domination is shared by a whole officer class. This gives a social prestige to what might otherwise be a merely individual tyranny over the instruments of a commander's will. Even in "democratic" armed forces preparation for war, like war itself, makes it essential that the majority shall give up all individuality and become passive instruments of another's will. Again, the military caste preserves the self-confidence of those who feel the simpler kind of self-importance. Many who lack qualifications by birth or wealth can gain social prestige by their physical prowess or cunning in a militaristic society; while, on the other hand, a considerable section of the leisure class finds in military activity its only outlet and source of influence. Small groups therefore desire to secure or maintain prestige for themselves or their "nation" by the only means they can conceive as giving prestige—superior force and cunning. War itself is for them a sort of glorified sport, alluring both in its savageness and in its hazards.

But militarism does not survive only upon the desire for domination and violence in "upper" classes. It depends also upon the existence of the type of person in every community who enjoys being ordered about and prefers to have no moral responsibility for his actions. As unconscious supporters of militarism there must be added all who cannot find relief for themselves from the routine or monotony of an industrial civilization. The desire for adventure merges with the desire for being "important." The bank clerk or the grocer can be treated as a "hero" when he wears a military uniform. Wherever a community is rigidly controlled by traditional tabus, the younger and more vigorous are attracted to what promises relief, even at the risk of death for themselves or disaster for all. The drums, flags, medals and signs of rank in connection with war have a great appeal, and all the customs and beliefs they express connect men with a past which they have learned to admire.

The whole moral tradition in the West is affected by the way in which history is written and taught so as to exalt the military virtues

and justify past violence. Each nation learns that in past wars it has been victorious; that its most important contacts with other nations have been military conflicts; and that its "heroes" are those who have won victories over foreigners. Naturally all these wars are believed to have been for the maintenance of "right"; and war is conceived as the situation in which one serves the nation, while in peace each man is supposed to pursue his own advantage. In non-republican countries kings and princes wear military uniforms. In all countries national pageantry is military. The past dominates the present and the future, through the unconscious reception of moral standards drawn from early chroniclers and poets. Militarism survives more strongly upon feeling as the reasoning upon which it once rested becomes more obviously inapplicable.

The history of this attitude toward war begins, at least in western civilization, with the primitive adventure described in the Homeric poems, which expressed admiration for bodily strength, cunning, courage and good fellowship. The incidental evils caused by these virtues when employed in war are not remembered, if the vanquished are slain or enslaved. Next comes the admiration for resistance to alien force, as expressed in Greek poetry of the sixth and fifth centuries, which survives in Plato as a tradition of valor. In his *Republic*, war against outsiders is assumed to be inevitable; and the criticism of war in the work of Aristophanes and Euripides seems to have had very little effect. The Spartans appear to have been militaristic in the crudest sense; but the majority of the Greeks were too sensitive to excuse the brutality of war on the ground that it promoted certain virtues.

In China there developed at a very early date a strong antimilitarist sentiment, which is expressed in the conception that the warrior ranks lower than the scholar and the trader. In India Buddhism had enough influence to undermine the primitive admiration for violence and the military virtues. But in Japan, on the contrary, in spite of Chinese and Buddhist influences, the moral ideal implied in *bushidō* supported an extreme form of militarism in the governing class. Both the good and the bad elements inherent in blind loyalty and disdain of death are still explicitly emphasized in the Japanese tradition.

In the West the Roman tradition has been the most powerful influence in the development of militarism. *Virtus*, or valor, constituted the highest Roman ideal. The great men of Rome were warriors. The Roman Empire was the result of

successful war; it was maintained by military efficiency; and only when Roman citizens began to be civilized enough to desire to avoid service in the armies did Roman civilization decay. In the fourth century it became difficult for the Roman authorities to raise troops except by recruiting "barbarians"; but troops had become the only basis of governmental authority since the later years of the republic. The Christians, who were unwilling to serve in the army, seem to have been influenced by objections to the traditional ritual rather than to war; the educated assumed that they could hire soldiers. There was no conception that war itself was futile or objectionable. The "just" war was always one in which one's own side was involved. The simple enthusiasm of the early Roman attitude, which alone implied "militarism," had died down. Literature and history, however, still preserved the more obsolete primitive admiration for the adventurous warrior, with the simpler virtues of endurance, courage and loyalty to a leader. The names of Alexander and Caesar gave prestige to military virtue.

In the Middle Ages the conception of service combined with the admiration for adventure to create "chivalry"—a source from which modern militarism draws not a few of its tendencies. But no armed forces comparable to a modern army existed between Roman times and the fifteenth century; and at the latter date soldiers were mercenaries, who had only the virtue of loyalty to an employer or leader, if that. They were not regarded as ennobled by their activities. In the Reformation, however, the influence of the warriors of the Old Testament and of certain bellicose sentiments expressed therein gave a new fillip to the admiration for military virtues. War became God's instrument.

In the seventeenth and eighteenth centuries service in arms was one of the recognized careers for a "gentleman." The divine will in war was combined with ideas drawn from an earlier chivalry. War was service of a king or lord and at the same time an opportunity for seeing the world. By the seventeenth century the old feudal levies had already proved useless and mercenaries hired for a particular job were expensive or unreliable. A "standing army" became a necessity for the ambitious sovereign. In England the power of the army during the civil war and the Commonwealth and the fear of an armed force in the king's control led to the section in the Bill of Rights of 1689 forbidding the raising of a standing army except by leave of Parliament.

The fear lest the civil power be overcome by an armed force survives in the English practise of making the Army Act dependent upon an annual acceptance by Parliament. Although in a sense this may be taken as an indication of the fear of militarism, it was tyranny which was the real object of attack.

The conception, however, that the civil power should be supreme over the armed forces became a tradition among democratic and liberal circles in England and France. The French Revolution introduced the conception of a citizen army, presumably immune from militarism; but Napoleon showed how easily the two could be connected. Despite the attempts of Benjamin Constant and his liberal successors in France to prove that the older technique of war was being rendered obsolete by the new commercial civilization, the tradition of militarism continued to persist. The most startling revelation of French militarism occurred in connection with the Dreyfus case, when "the word of an officer" was assumed by the spokesmen of the army to be beyond criticism. It seems clear that, even in a citizen army, the officer caste tends toward militarism. In 1911 Jaurès, echoing the antimilitarist sentiments of the parliamentary socialists, sought in *L'armée nouvelle* to establish the fact that it was possible to have a citizen army without militarism; but even he proposed the training of boys from ten years of age for possible war service in the future; and he accepted the traditional admiration for Napoleon and other military leaders whose intelligence he admired.

Meanwhile Germany was developing a new form of militarism. Prussia had defeated Napoleon by using the same appeal to the nation for raising armed forces which in the French Revolution had given Napoleon himself his first opportunity. The expulsion of alien conquerors by enthusiasts in arms, combined with the traditional Prussian admiration for valor and stern living, gave prestige to the leaders of the army. By an accident of history Bismarck, who had all the traditional admirations and an exceptional ability for putting them into practise, was able to use the results of the earlier resistance to Napoleon, which had saved Prussia, as a basis for uniting the German states in a new empire. The army became the symbol of imperial prestige, setting the standard of service and honor. The emperor was war lord. The feudal aristocracy took the lead in the armed forces and improved its own position by using the glamour of arms. The perfection of militarism, in its good

as well as in its bad sense, was attained among the upper classes in Germany in the years immediately before the World War. The German comic papers of the period, especially *Simplicissimus*, provide abundant evidence of the attitude of "outsiders" who were close enough to feel the social atmosphere. The militarism of Germany before the war was felt to be dangerous even by some Germans.

Although during the World War "militarism" came to acquire derogatory connotations as a result of anti-German propaganda, military virtues continued of necessity to be preached and a certain blindness to the actual realities of warfare was cultivated on both sides. At the end of the war there was for a time a violent reaction against militarism. In Fascist Italy, however, militarism soon reappeared disguised as a "national" gospel, and it has been intensively cultivated by Fascist or chauvinistic groups in other nations. Among such groups war is openly championed; a mythology of the nation supplies the place of "the will of God"; and control by an officer class is identified with social order. A less open form of militarism has likewise survived among certain small groups in almost every nation. Such militarism has been fostered to an unprecedented extent in the new systems of military training for boys in schools and colleges. The contention that preparation for service in the armed forces in a future war is useful "educationally," although it is a more or less honest camouflage, is a confession of the necessity in democratic nations of justifying in more rational terms the cultivation of the military spirit.

It is difficult to say whether the philosophers and social theorists have merely reflected contemporary attitudes toward militarism or have actually molded such attitudes. From the outset Christian theology has compromised with the warrior. It was assumed by theologians that war was inevitable; the only problem was how to be on the right side and, in a world whose "plan" was divine, the right side meant the winning side. Many protests were made against excessive cruelty, but few against the military spirit. With the Renaissance, however, Erasmus and others began to suspect the validity of the old arguments which excused war. Cornelius Agrippa in the *De incertitudine et vanitate scientiarum et artium* (Antwerp 1531) has a very pointed analysis of the ruffianism which is disguised as military honor. But philosophers likewise could find excuses as the church had done. In modern

times the most systematic rationalization of militarism is to be found in Hegel's *Philosophie des Rechts*, where he says that war promotes unselfishness (sect. 338) and that in modern times enmity is not directed against individuals. In England the Oxford Hegelian T. H. Green, repudiating Hegel, delivered in his *Lectures on the Principles of Political Obligation* (in *Works*, vol. ii, 2nd ed. London 1890) an attack upon war as contrary to the nature of the state. Herbert Spencer, impressed by the rapid growth of militarism in Germany, set out to analyze what he called the "militant type of society" and traced the origins of militarism to the strivings of an "upper" class for social control. But on the whole the theorists of the later nineteenth century seem to have disregarded the importance of war as an institution. The wild metaphors of Nietzsche can scarcely be regarded as implying militarism; and Treitschke only repeats Hegel. Since the World War the popular movement which aimed at undermining the militarist admiration for war caused the "outlawry of war" in the Kellogg, or Paris, Pact of 1927; but no philosophical treatise either advocating or repudiating militarism has appeared.

C. DELISLE BURNS

See: WAR; ARMY; NAVY; MILITARY TRAINING; CONSCRIPTION; MERCENARY TROOPS; MILITIA; NATIONALISM; NATIONAL DEFENSE; MOBILIZATION AND DEMOBILIZATION; PATRIOTISM; CHAUVINISM; PROPAGANDA; LOBBY; VETERANS; ARMAMENTS; ARMS AND MUNITIONS TRAFFIC; MUNITIONS INDUSTRIES; ANTIMILITARISM; PACIFISM; OUTLAWRY OF WAR; DISARMAMENT; INTERNATIONALISM; FRONTIER; PRAETORIANISM; CHIVALRY; GENTLEMAN, THEORY OF THE.

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MILITARY DESERTION is a term which properly applies only to the flight under various forms and for various reasons of free persons from obligatory or voluntary military service. Such flight may take place in peace time or in war time before or during battle; it may be secret or open, temporary or permanent, or it may involve desertion to the enemy. Desertion may occur on either land or sea, but in general there has been less desertion from navies than from armies because of the greater physical difficulty involved. The frequency of desertion, the causes and contributing factors as well as the methods of suppression have varied with the different historical epochs and military systems.

In early times, when armies were created almost exclusively for war emergencies, desertion was essentially a war phenomenon and all forms were punished in the same way, usually with death. Elementary considerations of self-preservation and military morale made necessary such a simplified means of administering justice. With the emergence of standing armies of mercenaries or of conscripted citizens the same forms of desertion occurred also in times of peace. At the same time a more humane treatment became possible. Distinctions began to be drawn between escapes not deliberately undertaken to avoid military duties and desertions which did have this direct purpose. If through cowardice or fear a soldier hid himself in a safe place before a battle or took refuge in the rear or with the baggage, he was not regarded as a deserter.

Distinctions were also drawn between desertions in time of war and in time of peace, between simple and conspiratory desertion and between first and habitual offenders. To go over to the enemy was counted the most serious crime. Except for certain periods these distinctions have been preserved throughout modern times.

The Romans were the first to regulate in a standard fashion the penalties attaching to desertion. In the oldest times, since the Roman army was a religious institution, desertion was a religious offense and deserters as well as those who instigated or assisted them were put to death. Later the *Lex julia* treated desertion as a lese majesty (*q.v.*). The scientific system of military penal law, which was developed under the Caesars and codified by Justinian, treated desertion in general as perfidy and violation of an oath but made certain allowances for extenuating circumstances. Although in times of war the death penalty was visited even upon first offenders, in peace time it was inflicted only upon second offenders. Going over to the enemy was considered high treason and incurred death by torture.

The Germans had at first no separate military penal law apart from their general legal system. Cowardice and desertion in battle were regarded as serious crimes, and simple deserters as well as deserters to the enemy were killed. At the time of the great migrations beginning about the fifth century the various Germanic tribes possessed no uniform notion of desertion; some tribes treated it as high treason, others only as a violation of contractual law. An attempt to regulate military crimes was made in the Frankish empire, where desertion was considered a violation of the oath of allegiance, a breach of faith against the king and as among the Romans lese majesty. Irrespective of motive it was punished by death and confiscation of property. Mediaeval military law, which was laid down by kings and emperors, regarded desertion in most cases as a violation of a contractual relationship between feudal lord and vassal; its punishment based on customary law was relatively mild. Summary capital punishment for desertion was introduced by the Hussites and by the Swiss at the end of the Middle Ages.

In periods when the militia system prevailed desertion was regarded as a crime against the state and entailed the most serious consequences, including outlawry and the loss of family and possessions; it was consequently of relatively rare occurrence. In the periods of the condot-

tieri and mercenary armies, on the other hand, desertion was merely a transgression of private law, a violation of contract, and therefore frequent, especially in cases where the soldiers had failed to receive their pay. Forcible enrolment, hard living conditions, rude treatment and cruel punishment were additional reasons which made desertion chronic and widespread in both peace and war.

The institution of mercenary soldiers gave rise to a specially regulated system of law. The articles of war covering both army and navy became the basis for the punishment of desertion. The Dutch and Swedish articles acquired a decisive significance for Protestant and the Hapsburg-Spanish articles for Catholic countries. The concept of desertion was given a very narrow meaning; extenuating circumstances began to be taken into account; summary execution gave way to regular court procedure. Desertion by officers and habitual and conspiratory desertions were considered especially serious crimes. Special rules governed cases of desertion by whole regiments. Certain laws of the French code for deserters, such as mutilation and hard labor, were adopted by other European countries. At the end of the eighteenth century capital punishment was generally replaced by flogging through the line and by trench digging, methods that had long been customary in France.

Since fugitives usually found little difficulty in crossing frontiers, thus making pursuit impossible, the various states began particularly in the eighteenth century to conclude special extradition treaties, called cartels, which were made as a rule for a certain number of years and were generally renewed on expiration. They specified in precise form the conditions under which deserters were to be extradited and fixed graded rewards for the denunciation of fugitives. None of these devices, however, was effective in checking the growth of military desertion.

With the emergence of the modern standing national armies and especially with the prevalence in the nineteenth century of the concept of the "nation in arms" desertion again became as in the days of the old militias a disgraceful crime against the state and the nation. A decrease in desertion was brought about by an intensified national consciousness, which stigmatized the crime with moral outlawry, as well as by the serious material and legal consequences which it entailed.

The progressive character of modern legislation shows itself in the sharp line of demarcation

drawn between illicit temporary absence and escape from the colors as well as in the fact that the distinguishing criterion of the two concepts is found in the intention to escape military service permanently. The Latin nations introduced a complicated system of various kinds of desertion, while the Germanic countries erected a clear and concise set of laws on the simple basis of the intention to avoid service. The penalties moreover remained harsher in the Latin states than in the Germanic. The recent British, American, Dutch and German codes meet fully the demands of modern conditions.

Related to desertion in certain respects was emigration before compulsory military service duties had been fulfilled; this became common as a result of the large emigration from Europe to the newer countries during the nineteenth and the early twentieth century. Some countries attempted to assert their claims for such duties upon the return of the emigrants to their jurisdiction. These attempts, especially where they were directed against individuals who had become naturalized in the country of immigration, gave rise to a number of international controversies. Steps toward the regulation of this matter in the interest of its naturalized citizens were taken especially by the United States through treaties concluded with various countries modeled on the Bancroft treaties of 1868. Under these treaties the country of origin relinquished its claims on such persons except when they returned and resided in that country for two years after having been naturalized as American citizens. The League of Nations has also attempted to promote some uniform policy on this matter, which still remains a source of some international friction (*see* DUAL CITIZENSHIP).

The attitude of the people toward deserters has also varied with the different periods. In the time of the free mercenary soldiery bitter warfare existed between the populace and the deserters, who often organized themselves into marauding bands. Individual deserters were seized and killed or delivered to the proper authorities. In times of standing armies, on the other hand, deserters enjoyed the full sympathy and even the support of the populace. Despite the menace of punishment the fugitives were offered shelter, given employment under assumed names and assisted across the frontier. When the concept of the "nation in arms" began to prevail in the nineteenth century, deserters were again regarded as contemptible enemies of the people and traitors to the nation. Exceptions were made

only in the case of those who deserted for religious or idealistic reasons.

The psychological cause of desertion in war time lies chiefly in the deep rooted fear of death; in peace time it is most frequently caused by sexual desire, homesickness or intoxication and sometimes by mental disorders, feeble-mindedness and epilepsy. Mass desertion, usually due to sudden panic, has in recent times been caused also by a general demoralization brought about through enemy propaganda.

National, social or political factors may also enter into the problem of desertion. The army of a country which embraces diverse national or racial strains may contain large irredentist groups whose sympathies lie more with the enemy, to whom they are allied by blood and race, than with the state to which they are bound politically. Mass desertion by such groups may exercise decisive influence upon the outcome of military operations, as in the Napoleonic wars, where Germans were made to fight against Germans, and in the World War, where various alien stocks and national minorities eager for statehood were represented in the Austrian army. This disintegrative tendency is particularly marked when the army in which these alien stocks are fighting is suffering reverses.

Desertion also occurs in revolutions and civil wars, in which political parties and social classes play the same role as irredentist groups in international wars. The disintegration of the Russian army in 1917 displayed how blood and class ties can link non-commissioned officers and plain soldiers with the cause of the revolution. The support of revolutionaries by an army often marks the decisive step in the real beginning of a revolution; this was to a certain extent the situation in France in 1789 and is very frequently the case in South American revolutions. It is difficult to draw any clear line of distinction between mass desertion under such circumstances and mutiny (*q.v.*).

Desertion may also be a factor in determining the outcome of prolonged civil conflicts. Such was the case in the American Civil War. While it was a problem to both sides, it was in the Confederate army that desertion was especially troublesome: thousands of conscripts, uninterested in the war because of ignorance or unconcern or motivated by Unionist sympathies and actual hostility to the southern cause and further influenced by widespread public apathy in some sections and by the lack of proper food, clothing and shelter in the army, deserted at every oppor-

tunity either to return to their homes or to join the enemy. Such desertions occurred not only individually but in groups of all sizes; whole regiments deserted at a time. The consequent weakening of the Confederate armies played a considerable if not a decisive part in the ultimate defeat of the South.

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See: MUTINY; ARMY; WAR; MORALE; FRATERNIZING; MERCENARY TROOPS; CONSCRIPTION; LESE MAJESTY; COURT MARTIAL; MILITARY LAW.

Consult: Endres, Karl, *Der militärische Waffengebrauch* (2nd ed. Berlin 1903); Stier, Ewald, *Fahnenflucht und unerlaubte Entfernung*, Juristisch-psychiatrische Grenzfragen, vol. ii, pts. 3-5 (Halle 1905); Bendix, Ludwig, *Fahnenflucht und Verletzung der Wehrpflicht durch Auswanderung*, Staats- und völkerrechtliche Abhandlungen, vol. v (Leipzig 1906); Sattelmayer, Richard, *Die unerlaubte Entfernung* (Tübingen 1910); Sagmeister, M. E., "Die Fahnenflucht im römischen und altdeutschen Kriegerrecht" in *Archiv für Militärrecht*, vol. i (1909-10) 434-38, and vol. ii (1910-11) 19-26; Gebauer, C., "Auslieferung von Deserteuren im 18. Jahrhundert" in *Archiv für Kulturgeschichte*, vol. ii (1904) 78-83; Lonn, Ella, *Desertion during the Civil War* (New York 1928); Martin, Bessie, *Desertion of Alabama Troops from the Confederate Army* (New York 1932); Real, Walter, *Ausreissen und unerlaubte Entfernung nach schweizerischem Militärstrafrecht*, Zürcher Beiträge zur Rechtswissenschaft, n.s., vol. xxiii (Aarau 1930).

MILITARY GOVERNMENT. *See* WARFARE.

MILITARY LAW is sometimes used as a general term describing the rules which restrict or justify the power of military commanders in all circumstances. At other times it is differentiated from martial law, military government and the control by troops acting in aid of civil authorities and is used to express an Anglo-American concept which refers usually only to the criminal law administered by courts martial, with jurisdiction only over the armed forces of the United States. It might also refer to the peculiar rules of property responsibility enforced by boards of officers under Article 105 of the Articles of War and by boards of survey authorized by the United States army regulations.

This narrow conceptual limitation of the expression military law is of recent origin and would have little relevance in other countries or in past times. In Roman law the term is used to define the peculiar privileges of the Roman soldier, who had the benefit of a separate civil court. One of his privileges, the right to make a nuncupative will, still survives but is not considered part of the "military law" today. In England under the feudal system a Court of the

Constable and Marshal, or *curia militaris* (see COURT MARTIAL), had jurisdiction over matters dealing with arms and heraldry. It was not of course restricted to discipline of armies in the field, since there was no defined difference between military and civil government. After the feudal system had waned, this court became an instrument of the crown and came in conflict with the jurisdiction of the rapidly expanding common law courts. The result of the conflict was to reduce its jurisdiction to disputes over heraldry, and it was finally voted "a grievance" by the Parliament of 1640. Modern military codes owe little to the Roman or early English systems.

Military trials by officers probably always existed as incidents to control of armed forces. Sometimes they were carried over into other fields. Military courts appear before military codes. Henry VII is said to have used them to impose fines for disloyalty. Both Mary and Elizabeth resorted to them against religious enemies, the former against the Protestants and the latter against the Catholics. Charles I, in attempting to raise and support an army, employed the term martial law, which at that time described any form of military trial, against citizens who refused to aid him, with the result that Parliament forced his assent to the Petition of Right in 1628, declaring all such trials—and by inference all trials by martial or military law—illegal, at least in periods of peace.

Such use of military law was without benefit of any organized code, although some regulations did exist. In the struggle between king and Parliament which followed, however, both sides issued articles of war and empowered commanders to try and punish military offenders "according to the Course and Custom of the Wars." The practically identical codes of the two opposing armies issued in 1640 and 1642 were framed after study of similar articles issued by Gustavus Adolphus in 1621 (published in London in 1639) and probably of the Dutch military code of Arnheim. It is significant that these codes, with the "councils of war" which were employed by Cromwell shortly thereafter to enforce them, mark the beginning in England of modern codified military law and courts martial. After the Restoration Charles II issued Articles of War and authorized courts martial. It was not until the accession of William and Mary, however, that Parliament passed the Mutiny Act of 1689, which is generally considered the first statutory enactment of British

military law. Almost two hundred years later this act, as variously amended, was replaced by the Army and Discipline Regulation Act of 1879, which combined Articles of War and the statutes. This act was subsequently repealed and then reenacted by the Army Act of 1881, or Annual Act, as it is now customarily called because together with its amendments it must, like the earlier mutiny acts, be reviewed and reaffirmed each year, possibly as a reminder of the continuing authority of the civil government over the military. British military law is now based on parliamentary acts and the regulations framed under their authority or in accordance with the custom of the military service.

Military law in the United States grew upon this British foundation. The first national code, passed by the Second Continental Congress in 1775 and revised the following year, is practically a copy of the British Articles of War of 1765. The first revision of the Articles of War after the adoption of the Constitution of the United States was made in 1806, and there were subsequent revisions in 1874, 1916 and 1920. The most significant change in procedure in these revisions is found in the provision of the most recent code for the appointment of separate prosecutor, defense counsel and legal adviser of the court (law member) for all general courts martial, all of which functions were formerly performed in part at least by the judge advocate. Today the judge advocate may still occupy the anomalous position of both prosecutor and legal adviser of the court but only on special request of the court. In its substantive aspects the code has been enlarged to include all common law crimes except murder and rape in time of peace. With regard to purely military offenses the original Articles of War have not been substantially changed.

In addition to the Articles of War and a very few supplementary statutes, usually called "military law," there must be added to the body of military law the lawful orders of the president, as commander in chief of the army, and of his duly authorized subordinates, all of which have the force of law. Chief among these is the *Manual for Courts-Martial*, which is issued by executive order. In the main it amplifies the Articles of War and prescribes trial procedure. Next in importance are *The Army Regulations* and *General and Special Orders* of the War Department. Commanders of corps areas and territorial departments issue for their respective commands similar regulations and orders, and

so on down the chain of command to the smallest post. All such regulations are enforceable in courts martial and must be accorded the status of law in the command to which they apply.

There is a notable lack of conceptual organization of general legal principles in the administration of military law. Former court martial cases are practically never cited as precedents, although their use for this purpose is expressly authorized in the manual for courts martial. Civil cases are referred to but rarely and only for the purpose of defining judicial concepts, such as the common law crimes. The atmosphere of the military court, the method of appeal and the absence of published "opinions" in decided cases prevent the building up of any substantial body of articulate doctrine. Opinions of the judge advocate general are published, however, and serve as a general directive in administering military law.

Custom and the inarticulate emotional attitudes based upon it play an important role in the administration of the law governing the armed forces of the United States. Such attitudes are illustrated in the use made by military courts of the concept conduct "to the prejudice of good order and military discipline" denounced by Article 96 of the Articles of War, and of the concept conduct "unbecoming an officer and gentleman" denounced by Article 95, and for which dismissal from the service is mandatory. Definitions of these terms by the manual are merely illustrative. The final decision in any particular case is a matter for the court to determine upon its own knowledge of customs of the service; evidence as to such customs being superfluous and in fact never offered. The civil and criminal law concepts of conspiracy and criminal contempt are equally vague. Yet civil courts dislike this lack of certainty and build up great bodies of literature to conceal the elasticity of such terms by elaborate formulation of principles. The military mind conceives no such necessity and thus escapes a great deal of very complicated logical analysis. A comparison of the elaborate philosophical treatment of the concept contempt of court by civil tribunals with the practical treatment of the concept conduct "unbecoming an officer and gentleman" by military courts illustrates the essential difference in fundamental attitude between military and civil law.

Questions of conflicting jurisdictions and the possibility of review of court martial decisions by civil tribunals are determined in a more con-

ceptual and less practical atmosphere; for such matters lie within the field of the civil courts and must be explained in their language in terms of conceptual legal categories. Thus courts martial are held not to be among the inferior courts of the United States which Congress may establish under article 3 of the constitution, since the judges of all such courts must be appointed for life or during good behavior. They are therefore no part of the judicial branch of the government, but instrumentalities of the executive provided for disciplinary purposes [*Dynes v. Hoover*, 61 U. S. 65 (1857)]. For purposes of permitting collateral attack they have been held not "courts of record" and therefore not entitled to the presumptions of regularity in favor of such courts [*Ex parte Watkins*, 28 U. S. 193, 209 (1830); *Chambers v. Jennings*, 7 Mod. 125 (1702); *Wilson v. John*, 2 Binney 209, 215 (1809)]. On the other hand, it is found that when double jeopardy is pleaded before a civil court by one who has already been tried by a court martial for the same offense, it is held that the court martial is judicial in nature [*Ex parte Reed*, 100 U. S. 13 (1879); *Grafton v. United States*, 206 U. S. 333 (1907)] and that its judgments as *res judicatae* are entitled to the same respect as those of any court in the land and are beyond the jurisdiction of inquiry of any civil tribunal [*Smith v. Whitney*, 116 U. S. 167 (1886); *Ex parte Mason*, 105 U. S. 696 (1881)].

Whether boards of survey of property responsibility or boards of officers assessing property damage against individuals under Article 105 of the Articles of War would be considered "courts" with reference to these various situations is an interesting speculation.

From the logical necessities of the civil courts in the United States has arisen the conceptual definition of military law to which reference has already been made. When courts decided to relinquish their authority to the military in such matters as occasional labor disputes, they had to justify their action under the constitution. This was done by constructing the concept of martial law which is supposed to exist as a matter of fact in times of extreme disorder. Courts then dodged examination of whether this "fact" of martial law actually existed by treating the executive declaration of its existence as conclusive except in the most extreme instances. It then became logically necessary to distinguish the continuing control of armed forces in times of peace by calling it military law and to differentiate the orderly military control of foreign

territory which might use civil courts as one of its instruments, by calling it military government. Finally, because the situations in which the phrase martial law had been used were subject to an unpleasant connotation, a fourth concept known as "the law governing troops used in aid of civil authority" was invented, which will justify most, although not all, of the military action taken during strikes and similar disorders.

Thus military law in recent times has come to have an accepted conceptual content which can be defined only in terms of the other three phrases outlined above. So fixed is the belief in the fundamental character of these concepts that older writers on the subject, such as Lieber, who did not differentiate between martial law and military law at a time when there existed no reason for such distinction, are accused of a loose use of terminology and a neglect of logical analysis. Failure to recognize or to discuss the purposes for which these distinctions have unconsciously been invented or the situations in which they become relevant has resulted in a very considerable body of conceptual doctrine about the phrase military law which has nothing to do either with the control or with the discipline of troops.

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See: ARMY; COURT MARTIAL; WARFARE; MILITARY DESERTION; MUTINY; MARTIAL LAW.

Consult: Bray, J., *Droit romain, essai sur le droit pénal militaire des romains* (Paris 1894); Krafft, É., *Justice militaire* (Lausanne 1918); Augier, J. G., and Le Poittevin, G., *Traité théorique et pratique de droit pénal et de procédure criminelles militaires* (Paris 1918); Vico, P., *Diritto penale militare* (2nd ed. Milan 1917); Hellwig, A., *Einführung in das Militärrecht*, Staatsbürger Bibliothek, vols. lxxxi-lxxxiv, 4 vols. (München-Gladbach 1917-18) vols. i-iii; Crémieu, L., "La justice militaire et la Société des Nations" in *Nouvelle revue*, 4th ser., vol. xli (1919) 193-211; Holdsworth, W. S., "Martial Law Historically Considered" in *Law Quarterly Review*, vol. xviii (1902) 117-32; Clode, C. M., *The Administration of Justice under Military and Martial Law* (2nd ed. London 1874); Banning, S. T., *Military Law* (17th ed. London 1929); Great Britain, War Office, *Manual of Military Law* (7th ed. 1929); Wilkins, R. J., and Chaney, W. S., *Handbook of Military Law* (London 1930); Glenn, G., *The Army and the Law* (New York 1918); Winthrop, W., *Military Law*, 2 vols. (2nd ed. Washington 1920); Ansell, S. T., "Military Justice" in *Cornell Law Quarterly*, vol. v (1919-20) 1-17, and "Some Reforms in Our System of Military Justice" in *Yale Law Journal*, vol. xxxii (1922-23) 146-55; United States Laws, Statutes, *Military Laws of the United States* (7th ed. 1930); United States, War Department, *Manual for Courts-Martial, United States Army* (1927).

MILITARY OCCUPATION consists in the action of organized military forces in taking control within territory not under the sovereignty of any state on behalf of which they are acting, and in the condition of affairs resulting therefrom. It is usually conducted by armed forces of sovereign states but it may be accomplished by troops not in the service of any recognized (*de jure*) state. Thus forces of a dependency which is in revolt against the metropolis, and whose belligerency has been recognized, may occupy territory of the metropolitan state—within the revolting dependency or in loyal territory—or perhaps of a foreign state. Unorganized guerrilla troops, however, can hardly accomplish this result.

The factual seizure or passive acquisition of control is decisive in establishing occupation rather than intent, the presence or absence of which has no effect in the attainment or prevention of the result. Intent without seizure will not produce occupation nor will a factual occupant be able to escape responsibility because of desire to do so. On the other hand, a proclamation of intent, while not strictly necessary, clarifies and strengthens the position of the actual occupant.

Strictly speaking, military occupation may take place in any foreign territory, including territory not under the sovereignty of any state. It is moreover true that such *terra nullius* is or has been most frequently occupied and acquired for the state not by civilian settlers but by naval and military forces. Nevertheless, this type of occupation is not considered to belong to the category under discussion. The question of whether or not a given occupation extends to a particular area is, in view of the nature of the institution, solely a question of fact.

On the other hand, military occupation as now defined may take place in time of peace as well as in time of war; and the two forms, while not dissimilar in their results, differ somewhat as far as their bases are concerned. History is filled with instances of these two basic types of military occupation. Virtually every war produces one or more cases of belligerent occupation, that of Belgium by German forces from 1914 to 1918 being the most striking. Pacific military occupations have also been increasingly numerous in the period since 1789 under the various systems of international regulation and alliances prevailing in Europe as well as in various outlying quarters of the Near East, the Far East, Africa and Latin America. Although a detailed study of these dozens of cases would

reveal the greatest diversity of relationships, a few broad conclusions may be abstracted.

The action of establishing occupation is hardly distinguishable from simple invasion or the incursion of troops into foreign territory and, like simple invasion, is not immediately accompanied by any extensive consequences. It is only when stable occupation has been completed that such consequences arise, and the first phase of the action is important chiefly with reference to the grounds upon which it may be undertaken.

The grounds upon which military occupation may, under common international law, be undertaken against another state are almost, although not entirely, the same as those upon which military action of any kind, or at least military invasion, may be undertaken. There exist doubtless rights of defensive military action within its own territory, possessed by every state as against every other state, which constitute little or no basis for invasion of the latter; and perhaps also rights of invasion, as in the case of capture of an imminently dangerous bandit, which give no rights of occupation. But in the main the legitimate grounds for occupation are the legitimate grounds for war or military action short of war—reprisals or intervention in time of peace—including military invasion. Military occupation is a form of action resorted to in connection with or as part of reprisals, intervention or war, and its justification must be sought in the justifications therefor. While there are thus included grounds which justify military occupation in time of peace, it appears that the difficulty of justifying any military action by one state against another in time of peace, that is, unless the former is willing to take the responsibility and is in a position to wage a war against the latter, renders mere military occupation in time of peace also somewhat difficult to sustain in point of law.

Conventional agreement may of course constitute a basis for military occupation. In this case the actual entry of foreign troops, being thus permitted, does not constitute an invasion, and the whole action is likely to be regulated or colored by the agreements in question. Not only the right to enter and remain but also the powers of the occupants are affected thereby. The tenure of the occupants is less precarious if founded upon a conventional agreement, and their powers can be defined therein so as to avoid subsequent objection and controversy. Perhaps the occupation of territory under lease may also be included here.

The grounds upon which one state, at war with another, may occupy the territory of a neutral state—as, for example, Salonika in 1915—must of course differ from those upon which it could legitimately occupy enemy territory; but they would not differ greatly from those upon which a state might properly occupy the territory of any other state with which it was at peace, except that the duties of neutrality on the part of the third state would constitute an additional obligation, the failure to discharge which might justify reprisal, intervention or war. The possibility that a belligerent state might misjudge or overestimate its rights against the neutral in this connection does not really alter the essentials of the situation.

The consequences of military occupation are severely restricted in one direction and at the same time very flexible in another. Such occupation definitely does not constitute conquest or a transfer of territorial sovereignty as long as the opposing state continues the struggle to regain its possession and does not by ceasing such struggle tacitly cede the territory, under the principle of *uti possidetis*. On the other hand, the occupant enjoys extensive powers over the territory and all persons and things therein, under both customary and conventional international law.

Thus the occupant may supervise or even conduct the administration of civil government, either through the existing officials or others whom he may designate in their places or add to their number, levying and collecting taxes for this purpose. He may also levy and collect money contributions and requisition supplies and services for the needs of the army of occupation. He may take possession of cash and securities, arms, means of transport and war supplies belonging to the occupied state; private property of this type may be seized subject to an obligation of restoration or compensation. Finally, he may utilize immovable state property under the rules of usufruct—religious, charitable, educational and artistic or scientific establishments excepted.

Even here the occupant is restricted in his activities. He must maintain order and safety, and respect unless absolutely prevented the laws in force, maintaining public services in full vigor. He may not require from the inhabitants participation in military operations against their own country or an oath of allegiance to him. He must respect private life and property and religious liberty. He may not impose collective

penalties for individual acts. For all payments and delivery of supplies payment or receipt must be given, and the property of local communities may not be treated as state property.

The net result is nevertheless to give the occupant large powers of legislation and executive and judicial authority. He may issue executive orders regulating the possession of arms, public assembly and all types of communication. He may conduct or supervise the operation of civil and criminal courts, and above all he may exercise a severe police power in the interests of public order and the safety of his troops. Within the limits already indicated he may assume substantially complete governmental authority, legislative, executive and judicial.

The actual relations between occupant and local population thus vary widely. Under certain circumstances, such as absence of hostility or great differences of language and culture, the occupant may interfere little with local life and government. In other cases a veritable state of siege, with martial law and rigorous repression, may ensue. This does not depend upon the wishes of the territorial sovereign or even of neutral states whose nationals or property may be affected, for these are all without voice in the matter. If local social and economic life is allowed to continue actively, it will be because this does not injure and may even aid the occupant in maintaining a quiet and thus an effective occupation. Local industry and trade as well as export and import trade are likely to be seriously deranged, given all the circumstances of the situation, and the occupant is obliged to make such arrangements as are possible for the provisioning and shelter of the population.

All of these matters vary somewhat between occupation in time of peace and in time of war as well as between conventional, or agreed, occupation on one side and common law, or *in invitum*, occupation on the other. Even when occupation is undertaken without consent of the territorial sovereign in time of peace, tension between occupied and occupant is likely to be less than in time of war unless there be armed resistance to the occupation. Where the occupation proceeds by agreement there will not only be no need, presumably, for the occupant force to use all its ordinary authority; but its rights may also be limited by advance stipulation. It still appears that in absence of such provisions it possesses such authority as is necessary in the situation.

Similarly the psychological results, both at

the time and later, may vary widely, as may the consequent effect on relations between the states. Certain occupations have embittered international relations for years; others have had no great effect. Sometimes an occupation even creates sentimental ties between the two countries. As most occupations are of the *in invitum* type and as under the best of conditions the presence of alien troops is likely to produce friction, the results are most frequently unfortunate.

Occupation is terminated by factual relinquishment or loss of power of control in the territory by the occupant or expiration of the conventional basis of his authority. Successful rebellion or reestablishment of the power of the territorial sovereign terminates occupation. The position of the occupant is precarious, in the absence of convention, and depends upon the ability to maintain his authority by force. Similarly the termination of war removes the legal basis for military occupation of enemy territory; other grounds, as, for example, treaty stipulation, may then exist for continued occupation; and the change from belligerent to pacific occupation does not destroy the essential character of the situation, although the juristic position of the occupant is somewhat altered.

The main principles of common international law on military occupation have long since been reduced to code form and given official international sanction. Thus the United States adopted in 1863 a code of rules dealing with the conduct of war on land, including military occupation; and this code was later of influence in the drafting of similar codes in other countries. In 1874 an attempt was made to agree upon an international code at a conference held in Brussels, but the draft convention, although it exercised some influence later, was never formally adopted. In 1880 the Institute of International Law, in session at Oxford, adopted a manual, *The Laws of War on Land*, of the same type, which likewise had some influence. Finally, in 1899, there was adopted, at the First Hague Peace Conference, a *Convention with Respect to the Laws and Customs of War on Land*, the *Annex* to which contained a section dealing with "Military Authority over the Territory of the Hostile State." This convention and its annexed code were revised at the Second Hague Peace Conference in 1907, and its articles—articles 42 to 56 of the whole code—constitute the basis of the present law on the subject.

None of these codes deals with military occupation in time of peace, because the subject

treated emerged as a subdivision of the law of war in general. The law relating to military occupation in time of peace has not been codified elsewhere, but it is believed that the operation if not the inception of such occupation is governed by substantially the same rules, in the absence of conventional stipulations to the contrary; under such circumstances, however, the military occupant may refrain from exercising all his powers and may not need to exercise all powers of control which would be warranted in the presence of a hostile population.

Military occupation, particularly occupation in time of peace, is undertaken for a variety of political objectives, which do not lend themselves to simple classification. It may be that occupation is undertaken to attain results which lie entirely outside the legal rights of the state taking action; its purpose may be to render aid to another state, to secure strategic military position, to ward off action threatening the safety or other rights of the state, to guarantee observance of a treaty, such as a treaty of peace, or payment of an indemnity or to vindicate previous violation of rights. War may or may not occur in any one or all of these cases. All of them constitute intervention in the sense of forceful interference in the affairs of another state. Whether they are morally or legally justified depends upon other considerations; namely, the justifiability of the war or intervention in question.

As for the present evolution and future of the institution, much may be conjectured but little concluded with certainty. In modern times military occupation without war has increased in frequency, in the variety of its objectives and the circumstances under which it has been undertaken; and while critically regarded in most quarters, it has not been attacked or condemned as uncompromisingly as has war itself. If, as seems not altogether improbable, grounds for international military coercion are to persist, it will perhaps be military occupation short of war rather than war *pleno jure* that will be found serviceable, especially if war itself is banned. Even international military police action on land would partake of this character. Hence the nature of the institution and the rules of law governing its operation are not without potential importance for the present and future.

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See: DE FACTO GOVERNMENT; MARTIAL LAW; SANCTION; INTERVENTION; WARFARE; REPRISALS.

Consult: United States, State Department, *The Laws*

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MILITARY ORDERS. In its original and most important sense the term applies to a type of Christian religious order composed of warrior monks. A product of the crusades, the military religious orders represent the combination, in its most perfect form, of the two mediaeval ideals of religious devotion and of chivalry. The enthusiasm which sent vast armies marching to the East to rescue the holy places from the hands of the infidels was the expression of a deep felt religious zeal and emotion on the part of a warlike society which found in the crusade an opportunity to exercise its chosen and honored profession of arms in the cause of religion and to receive in return for the congenial business of fighting the rewards of piety and asceticism. This crusading zeal was organized and perpetuated in the military religious orders, which kept alive the idea of the holy war long after it had ceased to have any popular appeal.

While the same cultural preconditions—the concept of a holy war and a well developed ideal of chivalry—were present in Islam as in Christianity, the Moslems failed to merge these elements into a clearly defined institutional pattern.

Certain counterparts of the Christian orders have, however, appeared at sporadic intervals in the course of Islamic history, in the case of such associations of fighting religious as the mediaeval Marabouts and the modern Tijāniya order. The Janizaries of the Ottoman Empire, although in many ways analogous to the military orders, were in reality merely a fighting corps in which celibacy and a rigid code of loyalty were by-products of a military discipline designed to serve the ends of the political authority. Buddhism has produced warrior monks, a notable example being the Japanese Ikko men of the fifteenth and sixteenth centuries; but the phenomenon may usually be explained as a local adaptation of the monastic system to the unsettled conditions attending a militant feudal age or civil war.

The Christian military orders resembled the regular orders of monks in that they took the vows of chastity, poverty and obedience; they operated according to rules based on those of Cîteaux and St. Augustine; they enjoyed all the privileges and immunities of monks, being subject only to the pope, from whom they received their charters; finally, like the monastic orders they were international and had establishments and lands in every country of Christendom. Their essential difference from the old monastic pattern consisted in their introduction of a new ideal, that of service to Christ and man in the hospital and on the battlefield rather than that of withdrawal from the world to the peace of the contemplative life. Of the three most important orders only the Knights Templar (founded c. 1118, chartered in 1128) were purely military in function. Created for the purpose of protecting pilgrims to the Holy Land and carrying on the crusade, the Temple was eulogized by Bernard de Clairvaux in a treatise entitled *De laudibus novae militiae* (1129), which set the seal of the church on the militant monasticism of the orders. The Knights Hospitallers (or Knights of the Hospital of St. John of Jerusalem, founded shortly after the first crusade) grew out of an eleventh century Amalfitan hospital in Jerusalem and were organized originally for hospital work; soon, however, they added warfare to their functions and became the rival of the Templars as a military order. The Teutonic Knights (or Order of the Knights of the Hospital of St. Mary of the Teutons in Jerusalem, founded c. 1190 during the third crusade) were organized among the German crusaders for joint military and hospital service.

From the point of view of the evolution of Christian religious orders the military orders represent in many ways a transition from monasticism to the friars, not only in their ideal of service but in their centralized administration and machinery for representative government. Differing structurally only in minor details, all three military orders were headed by a grand master and an advisory council of grand officers and were divided territorially into provinces, or *langues*, which were further subdivided into priories and commanderies. The provinces were roughly identical with the various countries where the order was established; for example, the provinces of the Hospital in the twelfth century were France, Italy, Spain, Germany, England and the Orient. The general chapter, a body composed of representatives from the local chapters as well as of the central officers and endowed with powers which made it theoretically the supreme organ of the order, assured interlocking control between the central government and the local units. The same end was served by the custom of placing one of the grand officers at the head of each of the provinces to direct local affairs in cooperation with the provincial chapter.

Although all members were represented in the chapters and all were equally subject to the rule, each order was rigidly stratified on the basis of function and privilege into three classes: chaplains, who performed the religious duties of the order; sergeants or serving brothers, free born men who acted as squires to the knights and labored in the hospitals; and the knights, who constituted the main fighting force of the orders and from whom all officers were elected. The knights, recruited exclusively from the nobility, gave to the orders their essentially aristocratic character. It was in them that the ideals of secular chivalry and of religious devotion converged. Their feudal background tended to intensify the insistence of the orders upon independence and autonomy and throws light on the tensions which at a later stage marked their relations to the unifying monarchs.

Throughout the twelfth and thirteenth centuries the orders rendered a valuable service in defending the crusading states and in keeping up the war against the Moslems. Their forces were the most dependable supports of the kings of Jerusalem, and the military history of the crusading states has well been said to be the history of the orders. Especially important were the knights in maintaining a series of castles

which defended the Christian kingdom and in supplying naval assistance to that seaboard community. The rivalry of the orders in the thirteenth century greatly weakened the resistance to the Moslems, especially since on occasion Hospital and Temple each joined forces with a Moslem prince against the other order. While they assisted the kings of Jerusalem it was always as allies, and they preserved the right to make peace and war at their own will. But although uncertain allies, they were always in the front in any war against the enemies of Christ; their valor in the last heroic defense of Acre in 1291 is one of the finest chapters in crusading history. "When they were called to arms they did not ask how many of the enemy there were but where they were," said Jacques de Vitry of the Templars. Pope Gregory IX referred to the Templars and Hospitallers in a letter of 1231 as those "without whom it is believed it is in no way possible to govern."

Nor were the kings of Jerusalem the only ones to avail themselves of the services of the knights. They were used by the popes and by secular monarchs for diplomatic missions and as members of the councils. Philip Augustus of France was served constantly by Aimard, a Templar, and Guerin, a Hospitaller, the latter continuing to serve the crown under Louis VIII and Blanche of Castille in the capacity of chancellor. Henry III of England and Philip IV of France both employed Templars as their almoners. The strong castles of the orders were often used as repositories for treasure, and the Temple in Paris became the chief treasury of the kings of France. It was in this connection that the Templars sowed the seeds of their own downfall, for they became the creditors of Philip IV and aroused the envy and covetousness of that grasping and impecunious monarch: when Philip IV began the process against the Templars he owed them 500,000 livres, which he had borrowed in 1299 to pay the dowry for his sister. In England with its more highly developed administrative machinery the Temple was never as in France the sole or the chief royal treasury. Nevertheless, throughout the thirteenth century it not only served as a storehouse for revenues flowing into the Exchequer and the Wardrobe but apparently was also very frequently employed to collect and administer the revenues independently. Further the Templars developed a system of international banking by means of letters of credit, which they issued to their houses in other lands. Money

could be deposited in the house of the Temple in one country and drawn from its house in another by the presentation of a letter issued by the officials of the house in which the funds were deposited. It was through the Temple that St. Louis sent money to Palestine after his return to France in 1254; John of England paid some debts in Auvergne through the agency of the Hospital; in 1220 Honorius III paid 5000 marks to Pelagius, his legate on the fifth crusade, with an order on the Temple at Paris for the money which had been collected in England for the crusade. Whether or not the Templars received interest in their financial transactions is not quite clear, although there is some evidence to indicate that in cases of delay in repayments of loans they added a heavy fine to the principal—a practise not inconsistent with canon law as interpreted by Aquinas. At any rate their various services to the monarchs were to some extent compensated by the award of special political or economic privileges, in addition to the immunities which as a monastic order they enjoyed in perpetuity: thus John of England exempted them from paying tolls in their wine and salt trade. The Hospitallers as well as the Templars were important commercial powers, competing for a time with the Genoese in the trade between southern France and the Levant.

With the fall of Acre in 1291 and the attendant expulsion of Christians from the Holy Land, the military religious orders lost their primary *raison d'être*. The Templars survived the obsolescence of their functions by little more than two decades. Undoubtedly the resentment and the confiscatory impulses of other monarchs besides Philip IV of France were aroused by this proud autonomous corporation of warriors, whose landed holdings alone are said to have been 9000 *manoirs* (a *manoir* being equivalent to the cost of maintaining one knight) in 1291 and 10,500 in 1307. But it was Philip who, with the added motive of eliminating a creditor, called to his aid the Inquisition, in one of the earliest historical applications of that instrument to the purposes of the civil power. Charged by Philip with all sorts of crimes, including heresy, unnatural vice, idolatry and black magic, the Templars in France were found guilty on the basis of confessions forced under torture, although they were not convicted elsewhere. In 1312 the Temple was officially suppressed by the timorous and compliant Clement V in the bull *Vox in excelso*, which while not declaring the guilt of the order authorized its abolition.

Its landed properties were made over to the Hospital, which collected them only after paying heavily in most cases; its movable goods enriched the royal and papal fiscs. The question of the guilt or innocence of the order is still a matter of dispute, but the documentary evidence in the case is generally favorable to the knights; and there is no denying H. C. Lea's statement that "If we accept the evidence against the Templar we cannot reject it in the case of the witch."

The Hospitallers and the Teutonic Knights justified their continued existence by securing new occupations on the fringes of Christianity, where they again took up the war for religion. But since in their new homes and ambitions they were territorial lords far more than religious orders, the opening of the fourteenth century may be said to mark the end of the period of the truly religious orders. Settling successively in Cyprus (1291-1310), Rhodes (1310-1522) and Malta (1530-1798) as the frontiers of Christianity receded to the West, the Hospitallers, under names which varied with the location of their sovereignty, governed these islands for centuries as outposts against the Moslems. They became primarily a naval power, fighting not only the Turks but the Barbary pirates. From their strategic positions in Rhodes and Malta they policed Mediterranean traffic and systematically harassed Moslem commerce. Although their warfare against the pirates materially aided Christian commerce, on the other hand they frequently used their maritime resources to prevent realistically minded Christians from trading with the infidels, an aspect of their activities which netted them valuable loot from intercepted vessels as well as considerable trouble with western powers. Their militant spirit became gradually relaxed, and it was a somewhat *fainéant* order which Napoleon routed from Malta in 1798. Its lands have by now been entirely secularized, and it exists today only as a papal order. In Germany and England, however, its tradition has been carried on in the Protestant hospitaller orders of the Evangelical Johannites (founded in 1852) and the St. John Ambulance Association (organized in 1826 and incorporated under its present name in 1888), which maintain hospital services; during the World War the latter organization distinguished itself by its work in cooperation with the British Red Cross.

The Teutonic Knights had a field of activity prepared for them when they were driven out

of Syria. As early as 1230, under the mastership of Herman von Salza, they had obtained from the pope and the emperor permission to conquer, convert and colonize the Slavic lands along the Baltic, where the Sword-bearers of Livonia were already operating. Working with the Sword-bearers, whom they absorbed in 1237, they occupied the districts of Prussia, Livonia, Courland, Estonia and Pomerania and settled them with German colonists, military vassals, urban burgesses and peasants. Granting extremely liberal terms in their charters to towns, they soon established many prosperous commercial centers in their territories, founding or resettling Thorn, Danzig, Riga, Reval, Königsberg and Marienburg. In 1309, simultaneously with the removal of its headquarters from Venice to Marienburg, the order transferred its allegiance from the papacy to the emperor, whose declining power held little menace for the order's autonomy. Master of the eastern Baltic littoral, the order became commercialized and allied with the Hanseatic League, to which most of its towns belonged; in fact the commercial prowess of the Hansa depended to no small extent upon the pioneering of the knights in the Baltic region. For a time the order itself joined the league. Maintaining and operating a fleet of commercial vessels, it exported large quantities of wheat and of amber, of which it had a monopoly, to Flanders and the west, and received in return cloth, salt and spices to be resold in the east. It also acted as intermediary between east and west for the trade in Russian wax and furs and in Hungarian copper and lead. Through these profitable undertakings it amassed stores of gold, which it loaned to foreign princes, exacting interest without pretense or concealment. The grasping commercial policy of the order, its high tariffs and monopolies, eventually estranged the Hansa and the towns, while its territorial advance forced Poland and Lithuania into union against it. After the disastrous defeat of the knights at Tannenberg in 1410 their subjects rebelled and called in the Poles; by the treaty of Thorn in 1466 the order was deprived of most of its land, retaining East Prussia as a fief from the Polish king. In 1525 Grand Master Albert of Hohenzollern took advantage of the Lutheran movement to secularize the order and convert East Prussia into a hereditary fief in his family, at whose extinction in 1618 it passed to the Hohenzollerns of Brandenburg. A few knights who refused to acknowledge the secularization of the order migrated to Austria,

where they continued the organization under the auspices of the Austrian monarchs, as an order of noblemen for hospital service.

The work of the Teutonic Knights in converting and colonizing Prussia is of great significance in the history of Germany and of the Slavic east. While before their advent the eastward movement had no doubt been prepared by economic conditions in the German territories west of the Elbe-Saale line, it was nevertheless the Teutonic Knights and their predecessors the Sword-bearers who organized the migration, united it under the glorifying banner of a crusade, provided it with its military strength and planned the process of settlement. They brought German colonists and German culture into a Slavic land and developed a wilderness into a prosperous country. With the same system and success which characterized their town building they undertook the improvement of agriculture; although in the process they reduced the native population to serfdom, they elevated the districts of east central Europe to the position of food exporters. When they accepted Lutheranism they gave the reformed religion a northern base from which it operated through the Baltic, and by the passing of their lands into the house of Hohenzollern of Brandenburg that state was strengthened and set on its way to becoming the leading power of Germany.

In Spain and Portugal, where the war against the Moors made the crusade a permanent institution, the idea of military orders had early been taken up with enthusiasm. In addition to the Templars and Hospitallers, both of which amassed great wealth in Spain through the generous grants of the Spanish monarchs, the peninsular crusade was ardently conducted by a number of special orders, such as Calatrava (chartered 1164), *Aviz* (organized 1166) and *Alcántara* (organized 1183), constructed usually on the model of the Temple. The Order of Santiago de Compostela established in 1175 to protect pilgrims on their way to the famous shrine of that name was unusual in that celibacy was not required of its members although it was under the rule of St. Augustine. Since it attracted the most aristocratic nobles, it soon became the wealthiest and strongest order in the peninsula. With the expulsion of the Moors in 1492 the orders became superfluous. Many of them remained in the peninsula, doing little save interfere in domestic politics, in which they consistently championed their own class—the feudal nobility—against the crown, thus hinder-

ing the process of political centralization. Others, like *Aviz*, *Montesa* and the Order of Christ, the last two of which had been created in Aragon and Portugal respectively shortly after the suppression of the Temple to take over its possessions and members, adapted themselves more successfully and continued the holy war by invading Africa and combating the Barbary pirates. The Order of Christ, unlike the great international orders, had been founded by the monarch to serve as a political as well as a religious instrument and it well illustrates the dual aspect frequently assumed by the crusade against the Moors through entanglement with princely ambitions. Not only was the order most prominent in missionary work in Africa but under the grand mastership of Prince Henry the Navigator it played an important role in Portuguese expansion. From missionary work the orders turned to commerce and eventually became entirely secular in their interests. In the late fifteenth and the early sixteenth century the members of all the orders were released from their vows, the orders themselves ultimately becoming royal decorations.

The hospital tradition developed its own group of orders, most of which were active in establishing hospitals, in rescuing prisoners and in doing similar social work. The Order of St. Lazarus to care for lepers was founded in Jerusalem during the twelfth century, but it became a military order and lost its hospital connection, finally being fused in France with the Order of Our Lady of Carmel and in Italy with the *Annunziata*. The Order of St. Thomas of Canterbury was another hospital organization founded by Richard I at Acre to care for English crusaders. The orders of Montjoie (1180) and of Our Lady of Mercy (1218—commonly called the Mercedarians) and the Trinitarians (late twelfth century) were all organized to rescue captives from the Moors in Spain.

In the fourteenth and fifteenth centuries, when enthusiasm for the crusade was being artificially stimulated, various princes organized minor orders within their own states on the model of the great military orders. Few of them, however, ever accomplished anything of note in the crusading field. Most of the important ones, which include the orders of the Sword (Cyprus, *c.* 1346), the Star (France, 1351), the Golden Fleece (Burgundy, 1429), the Holy Ghost (Naples, 1352) and St. Stephen (Tuscany, chartered 1561), became eventually royal orders of merit. The purely honorary royal orders, like

the Garter (c. 1348) and Bath (1399) in England, the Thistle (reestablished 1687 on an older order of uncertain date) in Scotland, St. Andrew (1698) and St. Catherine (1714) in Russia and St. Stephen (1764) in Hungary, derived in idea from these royal crusading orders but were intended merely to provide the king with a way of rewarding his friends and councilors or of recognizing distinguished service. Such decorations and orders of merit as the Legion of Honor and the Victoria Cross are still further derivations.

Even while democracy has advanced, the idea of founding new orders for whatever purpose or for no purpose at all has not been forsaken by the aristocratic nobility. The latest order is the Russian Order of St. Nicholas the Miracle Worker established in 1929 among former soldiers of the Romanovs. The memory of the old crusading orders is also preserved in Freemasonry; and the modern Knight Templar and Scottish Rite Mason feels himself the heir, through channels purely oral and unsubstantiated, of the traditions of the Knights Templar of Jerusalem.

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See: RELIGIOUS ORDERS; RELIGIOUS INSTITUTIONS; MONASTICISM; MISSIONS; PROSELYTISM; CRUSADES; JIHAD; CHIVALRY; HANSEATIC LEAGUE.

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MILITARY ORGANIZATION. See ARMY; WARFARE.

MILITARY TRAINING. "So sensible were the Romans of the imperfections of valour without skill and practice," says Gibbon, "that, in their language, the name of an army was borrowed from the word which signified exercise." With the fall of Rome, however, military training rapidly died out. The tactical genius of Epaminondas, the thorough training of Philip of Macedon, the methodical warfare of Alexander, the complete preparations of Caesar, were almost totally obscured. Knights were individually skilled with lance, axe and sword and they were encased in armor. That was the offensive and defensive strategy and tactics of the time. The manorial castle was the only school of arms. There the armorer was important: he and the professional retainers and bodyguards of the lord. The people, the peasants, were massed mobs in battle, little more. The phalanx and the legion were forgotten. The Assize of Arms and the Statute of Winchester were silent on practice. Military training, in the sense of creating a level of efficiency throughout an organized and disciplined force, did not exist. During the Renaissance Vegetius and Aelianus were read perhaps by some, but without serious application of the rules of tactics or intelligent organization of training. It was not until the time of Wolfe and Sir John Moore that Xenophon's light skirmishers began to be understood and

their rules tentatively applied to modern conditions.

The revival of interest in military training may be attributed primarily to the invention of the musket and the cannon. "Fire power" became the crucial element of war; its utilization required skill, and its employment on a large scale necessitated practise. Training and organization began. "Trained bands" of mercenaries rapidly supplanted the emergency militia; the "artillery company" of London held shooting exercises, and there was "drill" at Mile End and in St. George's Field. Louis XI of France hired Swiss instructors for his troops and held a three years' "camp" to forge an effective army. Military training began to take the form of precise movements in drill and manoeuvre. To the Italian wars, the Dutch wars, the wars of Gustavus Adolphus and the stern discipline and hard work of Cromwell, whose ideal was the "organized abnegation of self," may be traced the beginnings of modern armies.

The work of Frederick the Great marks a still more pronounced advance in the technique of military training. His methods left their mark on military life for over a century. Napoleon, who studied and adapted his tactics and his strategy, pronounced the Prussian army the model of its age. Frederick's contemporaries considered him "master of the science and practice of the profession of arms." Times changed and means and methods with them; yet even today much of his technique remains.

Frederick had his troops constantly practised in what is now called "close order" drill, insisting always upon absolute perfection of movement. What is more, this drill then bore a direct relation to battlefield formations and manoeuvres. As a result the Prussian lines "formed from column of route without confusion, gap or overlap." It had been the custom to go into order of battle "in the proceSSIONal manner" and to consume hours in the process. Frederick hit his foes before they were ready and secured his speed, not by hurry, but by plan and precision of movement. In order to prevent confusion in the difficult matter of musketry fire the Prussians were trained day after day, until they were able to secure a concentration of fire far superior to that of opposing armies. In his use of cavalry also, Frederick differed from his opponents. His troopers were frequently exercised in peace time at full speed and over very broken ground in battle formation. Men were killed at these drills, but his cavalry commander said that worry over

a few broken necks would prevent the king from having the kind of horsemen he needed for the field. Such training, coupled with the independence of decision Frederick granted his cavalry commanders, enabled the Prussian cavalry to deliver a terrible shock, in solid mass, in a whirlwind of dust and steel.

Composed of conscripts, of foreign mercenaries, of the slum scourgings of "press" gangs, and even of surrendered enemies, the Prussian army could never have achieved its victories or have undergone the rigorous training Frederick prescribed were it not for his harsh and rigid discipline. "This is an extraordinary man," said a French general of that age, "this prince who can get such good service from troops who detest him. Three quarters of his men would desert if they had the chance; nevertheless they fight like devils until that time comes." Frederick's interest in morale and in esprit de corps was an important part of his policy. Each of his soldiers was made to feel that his particular regiment was the best in the world with a reputation to be guarded and enhanced. "Without the Pomeranians," said Frederick to them, "I would not risk battle." Regimental "colors" were to Frederick's soldiers what the eagles were to the Roman legions. "I demand exact obedience," he declared. "The cavalry regiment which does not, upon orders given, immediately dash full plunge into the enemy, I will unhorse and make a garrison regiment. The infantry battalion which, meet what it may, pauses but an instant, shall lose its colors and sabers, and I will cut the trimmings from its uniform." This deference to morale is vital in military training. In addition to creating accuracy of manoeuvre and technical proficiency, training imparts self-confidence in one's ability to inflict more loss than will be suffered, and properly supplemented this results in esprit de corps and in a high morale. This fact was almost forgotten. Until recent decades, the tendency in professional armies has been to imitate Frederick's harshness without his understanding. In general, Frederick's followers fastened blindly upon minor details of his system, without seeing the complete picture. Although his supremacy was actually due to the factor of surprise, his less intelligent contemporaries and successors attributed it to his peculiar formations and to his drill and training, the externals of which they imitated for decades.

During the eighteenth century there were created certain military schools for the training

of officers. It was, however, the age of privilege, and noble rank was a surer road to preferment than application. The military schools were schools for nobility rather than training schools. There was a wide gap in education between field tactics and such military strategy as was taught in the schools. Technical training was satisfactory in engineering and in artillery and broad in military history, but in tactical thought it was almost nil. During the early years of the French Revolution there was one faint promise of military training in leadership, for the need of officers to replace those of the dissipated royal armies of France was keenly felt. In 1794, following a suggestion by Barrère, a practical military school was envisaged, a true *École de Mars*, not in a building like the old schools, but with nothing but a plain, tents, cannon and arms. It became, however, a tool of politics, teaching principally "love of country and hatred of kings," and was eventually abolished on account of its partisan doctrine. Finally, in 1802, Napoleon himself drafted the policies and saw to the founding at Fontainebleau of what afterwards became St. Cyr, an establishment to train selected youths in six months, to instruct others in a year to command a "division" and in two years to command a battalion. From this school he constantly called classes to shape and train his new drafts.

During the next half century the mark of Frederick the Great was on the armies of Europe. There was the captain whose idea of tactics was that "the movement of the troops must be majestic and in mass," while he himself never worked. Barrack square drill was the chief end of man, as Ian Hamilton says. Except in Germany, which was an exception on the continent, and in America, where the problems of the Civil War and the practises of Indian campaigning brought a newer and clearer military knowledge, stagnation set in for three quarters of a century until the Franco-Prussian War taught lessons which compelled thought. It was the age of the "regular" army—nationalistic to be sure, but more professional than patriotic, narrow and consecrated to habit and ancient form. In 1883 Sir Charles Dilke said, "The British soldier of today, and still more the British soldier of ten years ago, has been prepared much more for the show of peace than for the work of war." Viscount Wolseley, later to become commander in chief in England, in 1886 condemned the entire existing apparatus governing military education.

The French were not very different. They who had had the fullest experience in raising and preparing troops for battle under a master of the art and the finest military thinking of the eighteenth century, as exemplified in Maillebois, Guibert and Bourcet, speedily forgot or neglected the lessons their nation might have learned. The constitutional party was opposed to military force as a threat to public liberty. Louis Philippe neglected instruction. The French army became a thing of reviews, parades, inspections, with minute detail and grave solemnity. Discipline was an end, not a means, as with Frederick the Great. Training was almost such as to make the army forget its duty of preparation for war and to organize it for the panoply of peace. There was an occasional sham battle "before the ladies and for the entertainment of the villagers." A mere "comic opera" campaign into Spain threw the army into confusion. No one knew what to do. All notion of how to take the march or collect provisions had been lost. It is scarcely surprising that such armies, embarked for the Crimea, could not compare with the performance of Americans habituated by frontier campaigning to the circumstances of war. It took the Yankees at Vera Cruz two days to reach the city from the beach and thirteen days to open heavy fire. It took the allies before Sevastopol seven days to move an equal distance and twenty-seven days to bring their heavy guns to bear.

During this period there were extensive military school systems in every country in Europe, but only in Germany was there real progress in military training. It is not mere chance that it was a German, Goethe, who called the wars of the French Revolution and of Napoleon "the end of the war of kings and the beginning of the war of the people." After the defeat at Jena, Prussia was compelled to think of military training rather than of just an army. With its army limited in size, Prussia limited the term of enlistment to six months and devoted attention to practical training more intensively and more thoroughly than did any other nation and so successfully that each year eighty thousand well disciplined and well instructed soldiers returned to their homes. Germany learned its lessons well and with a clear understanding of what military training should be developed the finest armies in the world. Germany conquered in the Franco-Prussian War because its military training was superior. From Jena to Sedan, Germany had achieved a philosophy and a method of military

training. It was this that made the German armies so splendid in 1914, not the mere fact of nation wide conscription. Thus the authority Dilke described it in 1883: "When the recruit joins, towards the close of the year, he is as a rule a rather stupid and unwarlike creature. He has not even the proper control of his limbs, and this control is one of the first items of knowledge to be imparted to the soldiers of every nation. . . . The control of limb is given by what is called drill, beginning by the exercise of legs and arms, and going on to the rhythmical movement of smaller and then larger bodies of men, and thence to the handling and use of arms."

The next step in the process was what might be called technical instruction. Hardened and apt for its work, the army must be taught to use its weapons and to manoeuvre on the battlefield. It must know and practise hygiene and sanitation. It must know its tactics. There must be uniformity of technique, in language and method. But principally men must be taught to honor their country and their regiment and more especially to honor themselves, to have self-respect and confidence. "As we ascend," says Dilke, "from the obsolete military rule of the last century to the latest developments of the art of war, we find a steady movement in the direction of allowing freedom to the soldier, and this combined with the strictest discipline. Every individual is carefully taught that upon his especial exertions and even judgment may depend the issue of some crisis in the struggle for the safety of the Fatherland. Moral and tactical training go hand in hand. So soon as the ordinary drills are completed, soldiers begin to be taught in small groups, the best way of facing an enemy and obtaining an advantage over him. No more iron discipline exists than that which prevails in the German army, and its officers will tell you that there are no soldiers who require it more than do the Germans; yet in the face of this iron discipline, and even in accordance with it, the greatest individuality is inculcated. In its system of tactics, the German army works by small bodies, beginning even from what is called the group under a non-commissioned officer, and that group is tactically trained as thoroughly as the division of the army corps. Every German non-commissioned officer is taught to consider himself a leader of men, not only in the barrack room but on the field of battle."

Thus during the last half century a new ele-

ment has been introduced into military training. The entire tendency of tactics has been toward dispersion, a dispersion forced upon troops by the concentrated fire power of modern weapons, from the breech loading rifle to the machine gun. Massed battalions early disappeared from the scene. Even the three-ranked line of Frederick the Great was too dense. During the Spanish-American War and the British Boer War military men learned that soldiers must be deployed as skirmishers. In 1911 the rule in the American army was one man per yard. Fire power was the rifle; the more rifles on the line the greater the fire power. But the machine gun made such formations suicidal, and five yards per man is now the minimum. A lieutenant may find his platoon spread over a front of 240 yards. Control is difficult; it must be exercised through and even by the subordinate leaders. The voice is drowned in the din of battle. The "old army" is gone forever. The captain who used to shout commands as if on ceremonial parade must count upon another kind of discipline. Discipline is not the "flog or hang" of Frederick; it is a state of mind which obtains orderly results even in the absence of orders. It is part and parcel of confidence and harmony of training. Now training must develop the mental and moral as well as the physical qualities of the man in the ranks.

Modern methods of tactical training, by which this result was attained by the Germans in 1870 and in other armies since that date, were initiated by the Germans, imitated by the French, fostered by Foch, copied by the American group at Leavenworth and are now recognized as the only practical methods. War is a practical art. It has its doctrines and its principles; but on the sloping hillsides it has its concrete facts. The commander must estimate the situation which confronts him; he must ponder and decide the problem; he must secure vigorous execution. War cannot be learned, as Foch has pointed out, by practical experience, "for that school cannot be opened and closed at will." Nor can it be learned by lectures or by reading. It can be learned, and during the last half century it has been learned in all the major armies of the world, by the "problem" method—in the field with troops, in the field without troops and even indoors with maps. In assumed situations officers and soldiers, generals and privates, are asked to give their decisions and their orders, to move their troops, real or imaginary. In military schools, in postgraduate courses, in core

spondence courses, in field manoeuvres of all units from squad to division and army corps, soldiers the world over are thus playing the game of war, developing independence of thought, of judgment, of decision and of resolution in the face of difficulties. There must be uniformity of instruction to secure uniformity of understanding, lest by misapprehension of intention and by frantic flights of genius the organization fly apart or wear itself out with internal friction. But there must be practical understanding, and it begins to seem that this is the key to modern military instruction. With the spread of popular education and of universal suffrage, of ideas of equality and of liberty, it becomes impossible—and undesirable—to resort to the bludgeon type of discipline of Frederick the Great. Patriotism, teamwork, esprit de corps, are now essentially the appeals.

If this method of training was considered necessary prior to the World War, it is now looked upon as doubly essential. All armies at present admit that the corporal and his squad form the largest unit which can be controlled directly by a single man in battle. The solid masses of other days are but the ghosts of armies. Battle is a struggle of small groups, and the nationals whose groups act best in cooperation in accordance with the general plan will have the best of the day of battle. It is indeed a fact that instructions now given to privates, corporals and sergeants on the proper operations of squad and section are more soundly based and more thoroughly useful than the majority of the works on "tactics" which enjoyed popularity throughout Europe during the eighteenth century.

Training of officers commences early. For many decades there have been "military schools" in Italy, Russia, Austria, France, Germany, England, Switzerland, the United States and elsewhere, to give basic education and military knowledge and technique to prospective officers. During the latter part of the nineteenth century, there were created various "schools of application" attended by officers already commissioned. At first these schools gave instruction only in specialized technical branches, like military engineering and artillery service. But now in all armies such schools exist for infantry and cavalry, and there are "staff schools" or colleges which give instruction in troop leadership, in command duty, in staff functions, in the coordination of effort. At these schools the "applicatory," or problem, method of instruction is

used. The French cavalry school at Saumur was organized in 1853, not as a mere school of equitation but in order to train instructors who should diffuse through the corps a uniform system of instruction. Moreover there have been "garrison schools" regularly attended by all officers on duty with troops, at which they refresh their minds and constantly practise in "sand table" or map manoeuvres the use of the principles they have learned. There are in addition annual manoeuvres, which are not mere sham battles or tests of training, but principally means of practical instruction and exercise on actual varying terrain. The officer must be a student all his life, "reading and rereading the lives of the great captains," as Napoleon said, or else, as the British regulations insist, he must study the application of the principles of war, as they are enunciated in field service regulations, by means of concrete cases from military history.

"Every military writer of repute," remarked Dilke fifty years ago, "holds the opinion that the necessity for thorough tactical knowledge comes down much lower in armies than it used to do, and that even non-commissioned officers must now be able to handle small bodies of troops with a tactical insight which used to be looked on as the attribute of generals only." Sixty years ago General Upton found the Italians conducting special schools for their non-commissioned officers. Other observers agreed that in all continental armies of that time tactical exercises were developed and practised which had been designed with the special aim of making the non-commissioned officers think.

Modern warfare requires also fuller instruction and understanding on the part of the ordinary private than did the warfare of a hundred years ago. The Americans and the British now declare the need of "instruction along educational lines" to increase the military efficiency of the simple soldier. For decades intelligence and education have been insisted upon as essential. In Great Britain and Germany illiteracy today is virtually non-existent. In these countries there is a quicker understanding to begin with; in other nations—considering the type of warfare that must be waged in modern times—some deference must be paid and some time must be devoted to increasing facility of understanding. The stiff lines and heavy columns of long ago required mere mechanical obedience; the flexible interdependent groups of today require a high degree of understanding and knowl-

edge in the lower ranks. All armies strive to instruct to this end.

It is said that the present German army is the most efficient in the world; its privates are trained like 100,000 sergeants. It has attained this proficiency because it happens to be—by compulsion, it is true—composed of long service professionals and has made its training progressive. In the British army the same opportunity exists. All recruits spend six months in "depot battalions" before going to join their proper units, and training then can be more advanced. In compulsory service countries, like France, all drafts join in large groups. Professional instructors lead them stage by stage until they reach an appropriate degree of "unit" proficiency. In America the flow of volunteer recruits to each regiment or company is neither steady nor regular. Recruits join in dribbles. Training tends to repeat itself year after year and often with much energy spent in repetition within the year. Every effort is made to make training progressive, but there is the handicap of a constantly changing personnel. In Australia and Switzerland, which have such short terms of service that their conscripts are called "militia," progression in training is secured by reaching into the schools and giving physical drills, even military drills, and utilizing "service periods" to form and practise organizations, to have field manoeuvres and higher types of instruction.

How long then does it take to train an army? The Australians with their premilitary work already accomplished do it in short periods of time before their men reach the age of twenty-six. The Swiss also have premilitary preparation, have sixty-five to ninety days the first year, and refresh minds and reweld units in eleven-day (or fourteen-day) periods thereafter until the citizen has passed the peak of vigorous manhood. The British term of service lasts for many years, the American for one or three. The German and the Austrian terms used to be three years, which is the period now specified in Italy; France has a one-year term. Yet under the pressure of urgent enthusiasm or pressing danger much quicker work can be done. After Tilsit the German period was limited to six months. During the World War the average American in France had six months' training in the United States and two months' training in France. It took approximately a year before the first increments of "Kitchener's mob" began to be effective in France. The French volunteers of 1791, under competent leadership, won the battles of

Valmy and Jemmapes with from six to nine months' training. In 1846 it took four or five months "under expert officers and strict discipline" to prepare troops for the field when Zachary Taylor moved from Matamoros into Mexico. The question of training in the hour of emergency is thus a special problem. First, there must be time to harden the troops. Second, there must be time to create a full organization and to arouse a sense of unity and of esprit de corps. Third, there must be time to teach habits in handling weapons and correct thinking in tactical situations. It has been repeatedly said that American casualties in France were 50 per cent more than they need have been because of lack of training. To state that eight months is insufficient is difficult, however, when other troops have been prepared in less time. If the experience of Napoleon is recalled and results elsewhere are compared, it is possible to say that that time might be slightly shortened. To shorten it, certain preliminary conditions must be met. There must be an organization capable of expansion so that new increments may be absorbed in and not simply added to existing units of competent veterans who, like Napoleon's veterans of 1809, stamp the recruits with their seal. There must be a certain modicum of military training disseminated throughout the citizenry of the country, similar to the premilitary training now current in Australia and in Switzerland, and perhaps to the school, college and summer camp training given in the United States today. There must be an extensive corps of competent instructors, like the depot units of Britain, which finish with their recruits in six months; like those of Germany, which were able in four weeks to forward competent replacements to units in the theater of operations; like those of the commissioned and non-commissioned groups of the American regular army charged with supervising the training of National Guard and reserve units for a future emergency. The American complement of such instructors and the leavening of veterans in the "National Army" divisions of 1917 were insufficient for the task; the United States is now far better fitted to execute a similar expansion. There is always a compromise between the McClellan who wants to train interminably and the politician who wants decisive action and a victory by immediate battle.

It has sometimes been said, and critically, that every army in the world is training for the "last" war. The indictment holds that there is

nothing progressive about military training, and some British writers like to allude to the "monastic" mind of the soldier. But the indictment is not true today, for the rule now is to follow the precepts of Marshal Foch, who before the World War told a class of his students: "Tomorrow you must be the brains of an army. Today you must learn to think." The tendency is toward progressive thinking. But the saying has some modicum of truth in that most developments in military science and art have either arisen during war or have been developed from incidents of war, expanded during an ensuing peace and better prepared for actual use. The World War taught the full value of the machine gun in action and altered formations and changed tactics. The World War produced the tank, the germ of the great progress in mechanization which has subsequently been made in the alert armies of today. The continental wars brought conscription to France and its imitation into Prussia, while the Franco-Prussian War established it in Europe; the World War forced it upon England and the United States, traditionally averse to such an idea.

Wartime training must be at higher speed and is always more effective on account of aroused patriotism; peacetime training is more decentralized and in most armies is largely aimed at the improvement of the officers and non-commissioned officers of the regular establishment to be leaders of larger units and instructors of newer men. It is also aimed toward the dissemination of this training among the civilian population, among yearly "classes" of conscripts, as in France and Japan and Italy, and among volunteer citizens, as in England and America.

Most valuable on a large scale, perhaps, of all training being given is that of citizens in summer camps, as instituted by General Wood in the United States in 1915, and of students in colleges and universities, as initiated in England's Officers' Training Corps in 1908. Annually over 30,000 American youths attend a four-week training camp, where they learn the rudiments of military training. Many of these come back in successive years for advanced and progressive instruction and perhaps qualify for commissions in the reserve corps. Once commissioned, these new appointees have fifteen days of training every three or four years, and they have localized assemblies for instruction and take correspondence courses in tactics. Even those who never return have gained something:

at least the rudiments of military training and an orientation which would be of great value in time of war. There are over 377,000 men who have received such training in the United States today. Of course they have not the sure poise or the certain confidence of the regular officer and soldier; but they will at least escape bewilderment and confusion. Similarly, in many schools and colleges there is military training for students, sometimes voluntary and sometimes compulsory, with periods the first two years devoted to general training and the last two years to leadership. Enrolment in a single year reached the figure of about 120,000. These Reserve Officers' Training Corps in the colleges exist, as was said of the English, "to provide officers in time of war" from among the highly educated. The training is conducted at a leisurely rate and bears no relation to the intensity of work, mental and physical, which is undertaken when armies are being raised in time of war.

This type of training is often criticized as intended to "militarize" the country. Those who take this attitude charge that such instruction is not confined to military science but includes teaching of government and citizenship from a militaristic, nationalistic point of view. Defenders of military training in schools and colleges claim that it offers students valuable physical and character training, teaching obedience, respect for law and other elements of good citizenship. Opponents deny the quality of this training. They also object to it on economic grounds, holding that the results obtained, even from a military viewpoint, are not commensurate with the cost.

Other training is that given the "militia" or National Guard units of the various states or counties, in America and in England respectively. It consists in the United States of approximately seventy-two hours of indoor training and of two weeks of outdoor summer training each year. Such training is voluntary; and although it has the benefit of expert guidance by advisers from the regular army, it is naturally neither so arduous nor so thorough and complete as that of the professional soldier. Both reserve officers and National Guard officers are well represented by students at the advanced training schools of the different branches of the service, and so there is uniformity throughout the organization, among amateur as well as among professional soldiers.

In America and in England, then, training is

voluntary and is uneven in progress. Among the regulars it is rigorous, with emphasis on the training of leaders; among the militia or National Guard it is partial, with the idea of maintaining volunteer units capable of expansion and of use soon after war is declared; among the reserve officers and those training to become reserve officers, it is primarily theoretical, aiming to adapt natural and habitual leaders in civil life to military leadership in time of war. In countries like France, Italy and Japan, where service is compulsory, training is complete and thorough by increments, or "classes," which—after their service with the colors—are allowed to go their normal civilian ways, subject only to short refresher recalls to insure retention of soldierly habits and solidarity and continuity of organizations. In short term compulsory or "militia" countries like Australia and Switzerland, training is superficial and brief, oft repeated, without either the immediate effective striking power of a country like France or the wealth of efficient reserve officer instructors such as the United States possesses.

Since the early days of professional armies—those of Frederick William, the father of Frederick the Great, who made of his soldiers a caste apart, with special privileges—there has been a separation of the military from the civil population. This was true in days of strictly professional armies. It was true in the years when soldiers lived at distant colonial or frontier posts, far from home, remote from the opportunity of exercising the suffrage, when personal advancement was by seniority and not by achievement. But it cannot be so true in an army which has such countless contacts with civilian reserve officers as the "nation in arms" type of organization now creates, or in an army like that of the United States with thousands of its officers on "civilian duty" at schools and colleges, with National Guard and reserve units, with garrisons large in size tending to be concentrated at or near population centers, like New York, Boston, Baltimore, San Antonio and San Francisco. Officers and enlisted men of the present are closer to civilian currents of thought than were their predecessors.

Armies of the twentieth century differ in training from their predecessors by the difference of conditions under which they operate; they tend more toward practicality and less toward pomp and parade, more toward intelligence and less toward blind obedience, less toward mechanics and more toward under-

standing. By these tendencies they conform to the spirit of the times.

ELBRIDGE COLBY

See: ARMY; WARFARE; CONSCRIPTION; MILITIA; EDUCATION.

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Examples of method may be found in: United States, War Department, *Training Regulations* as follows: *Marksmanship*, no. 150-10 (1923), *Infantry Combat Principles—the Rifle Squad*, no. 420-105 (1923), and *Scouting and Patrolling, Dismounted*, no. 200-5 (1923). Great Britain, War Office, *Training and Manoeuvring Regulations 1923* (1923), offers an analysis of system.

MILITIA

CONTINENTAL. The duty of the citizen to defend the homeland against foreign invasion has been recognized throughout history. In the earliest forms of social organization the obligation of military service in time of emergency applied to the entire able bodied male population. With the growth of social stratification

militia service was often limited to freemen or, as in early antiquity, to property owners or the military aristocracy. At the call of danger the citizen soldiers, bringing with them their own arms and equipment, transformed themselves as best they could under the emergency into fighting units. With the conclusion of hostilities the soldiers became absorbed again in their round of civil duties, unconcerned until the next summons with problems of military organization or training. This reliance on untutored skill and native fortitude, although an excellent safeguard of individual and collective liberty, did not prove adequate to the military demands of a more highly organized and ambitious state. Adapted by its very nature to the defense of the locality and depending upon a highly developed sense of tribal solidarity, the technique of the citizen militia was obviously ill adapted to the prosecution of foreign campaigns or to a less cohesive social system. Accordingly among the warring commercial empires of the ancient Mediterranean the lure of material reward was introduced into the conduct of military enterprise to supplement the older ideals of tribal responsibility and patriotism. The wars of antiquity were carried on in the main by well paid, highly trained mercenary armies, which showed themselves, as, for example, in the Second Punic War, greatly superior to the citizen militias which they encountered.

But in a military system predominantly mercenary the older militia technique managed, although in less comprehensive and spontaneous form, to persist in certain areas. Instead of drawing upon the entire population the militia, in the later city-states, for example, was confined to the ruling class; so that militia service, which had come to be fixed at a definite number of years, became a badge of class privilege. In the case of prolonged wars, when the cost of outfitting and supporting the militia was high, wages and equipment were frequently supplied by the government. The persistence of the militia alongside of newer forms of military organization is illustrated particularly in Persia and Sparta, where the militia formed the basis for recruiting standing armies and for the training of reserves. In fourth century Athens the militia was revived temporarily in the period before the Macedonian conquest, while in Macedonia itself the militia was subsequently transformed into a sort of standing army. Early Rome relied entirely on a citizen militia, but as a result of the overwhelming defeat at the hands of the Cartha-

ginians Scipio rebuilt the Roman military machine on a solid foundation of mercenary soldiers. During the final days of the empire the Romans reintroduced the older technique of the colonial militia in the administration of outlying regions.

In mediaeval and modern Europe as a result of the greater persistence of the older tribal ideals of solidarity and liberty the militia tradition found a more congenial soil than in antiquity. The pure militia system prevailing among the German tribes during the early Middle Ages became only gradually distorted by the new feudal military organization and in many localities continued, although in a degenerate form, to exist side by side with the feudal armies. Among the early Slavs and Swabians a modified form of militia was used as a device whereby various sections of the tribe might alternate in the performance of military duty. The growing specialization of function within the social group began to make itself generally felt with the rapid rise of the towns in the late mediaeval period. The great masses of peasants outside the towns withdrew from participation in military activities, which rapidly came to extend beyond the limits of the nation and to be monopolized by adventurers and ambitious knights who placed themselves at the head of mercenary bands bought in the market and kept together by the lure of wages and spoil.

With the spread of mercenary armies during the Renaissance and the rise of standing armies during the later period of enlightened despotism the militia, at least on the continent, sank to a comparatively subordinate position. The steady development of the art of war—as regards both material and tactics—left little place for the impromptu, hand to hand fighting characteristic of early militia warfare; the increasing complexity of commercial and industrial enterprise and the progressive tendency to division and intensification of labor did not permit of the kind of exhaustive training that would have been required to turn a citizen into a soldier of the new model. The militia was thus as a rule delegated to the less ambitious role of local defense, although occasionally larger demands were made upon it; in the eyes of the more progressive experts in the art of war the manoeuvring of the citizen soldiery assumed, as may be judged from the cartoons of Hogarth, a somewhat ludicrous appearance. Yet despite loss of prestige a modified, gradually less amateurish militia persisted, as it had in antiquity, into a more complex era

of warfare and adapted itself to a more elaborate system of military organization. In the fifteenth century France established the "free archers" militia and toward the close of the seventeenth instituted a system of compulsory *milice*, which served as a convenient recruiting agency. Machiavelli inaugurated a militia system in Florence; the shortage of money forced the German princes after the sixteenth century to create throughout their provinces defense units which were essentially militia in character. The Russian *branka* inaugurated by Peter the Great resulted in the spread of local militias, while the Swedish *indelningsverk* and the Dutch *shutterij* were instrumental in keeping alive the older tradition on the continent.

With the overthrow of absolutism in the French revolutionary period it was hoped by many, particularly by the Jacobins in France and Scharnhorst and Gneisenau in Germany, that the triumph of liberty and democracy would mean a return to the older military system based on tribal solidarity and collective responsibility. The concept of the "nation in arms" has resulted by and large, however, in a compromise between the original militia presupposition of general liability to service in time of emergency and the standing army tradition of trained and seasoned troops. In some of the less exposed countries, it is true, the militia is scarcely distinguishable from a standing army, and the standing army from a militia: in Norway the militia system provides a permanent military nucleus, while in Sweden the standing army is recruited on a short term basis. In general, however, on the continent the combination of standing army and conscription, which has prevailed since the nineteenth century, has been violently attacked by liberal and socialist champions of the spirit of the pure militia. Bebel in Germany and Jaurès in France, realizing the dangers of a centralized, absolutistic control of the military strength of the nation, won over their parties to the militia system, which for them constituted a transition to the complete abolition of all military organizations. In the antidemocratic regimes which have sprung up in the wake of the World War proletarian or Fascist militias have been introduced as props for party dictatorship. The Italian militia forms a section of the regular army and serves not only in maintaining domestic order but also in training the youth of Italy and in continuing the education of those who have served in the army. Besides the Fascist militia there is in addition a corps of vigilantes,

which may be viewed by a considerable stretching of the term as a remote variant of the militia type.

It is only in countries enjoying a high degree of geographical isolation or which have been politically neutralized that the militia proper has been able to maintain its prestige and vitality down to the present day. On the continent mountainous regions like those of Switzerland and Illyria have been particularly conducive to its perpetuation. Thanks to its political neutralization Switzerland affords in its federal army the only present day example of the pure type of militia. There are no permanent units and only a very small corps of professional officers. In peace time the troops are called only for training purposes or in case of civil disturbances. It is regarded as a patriotic duty to give the youth of the country a military education.

PAUL SCHMITTHENNER

ANGLO-AMERICAN. As defined by Adam Smith a militia is composed of men who "join in some measure the trade of a soldier to whatever other trade or profession they may happen to carry on." In Anglo-Saxon countries the militia has symbolized to a unique degree the tradition of local authority and individual liberty. The spirit of the militia has been repeatedly invoked, especially in England and the United States, against threatening manifestations of militaristic dictatorship or centralized authoritarianism. Service in King Alfred's *fyrd* was as a rule restricted to local counties, save in cases of actual invasion. County and parish were responsible for quotas, not the individual for service to the crown. Units were regulated in the counties, officered by landowners and their relatives.

The "home and hearth" idea has persisted. Toward the close of the mediaeval period the militia was revived to supplement the mercenary and standing armies which were fighting England's wars on the continent. The political isolation which England enjoyed by virtue of her insular position enabled the dual system to persist into a period which on the continent witnessed the gradual decay of militias. With the spread of British colonization the militia took firm root in the New World. The Military Company of Massachusetts, subsequently known as the Ancient and Honourable Artillery Company of Massachusetts, formed in Boston eight years after the arrival of the Puritans in Massachusetts Bay Colony, represents the earliest transferal to the new soil of the older English institution. As

in the Guild of St. George, chartered by Henry VIII a century earlier, the time honored features of local control and voluntary service were strictly observed. In contrast to continental practise the ideal of voluntary service has been perpetuated. Organized militia units continued to be filled with men who served freely. Other citizens liable to service were called unorganized militia.

So thoroughly was the idea implanted that militia were state troops for local defense only that at Detroit and on Lake Champlain in 1812 they declined to cross the Canadian border. The act of the newly created United States Congress in 1792 establishing a federally controlled militia was never enforced because it envisaged universal compulsory enrolment, although not training, and enforcement was left to the states, which preferred selected men voluntarily enrolled. Militia regiments remained state units: Seventh New York, Fifth Maryland, Eighth Massachusetts. Commissions were from the governors. The protracted controversy between the North and the South over determining the boundary between federal and state sovereignty brought to the fore with added intensity the question of militia control, and during the Civil War itself the older local tradition made it difficult at times for the southern government to concentrate its man power. A Confederate court in Georgia, reechoing the very spirit of the Anglo-American tradition, defined the militia as a "body of citizens enrolled for military discipline. They are enrolled by state authority with reference to state boundaries, they are organized, officered and disciplined by state authority. . . . They are not separated from the mass of their fellow citizens nor withdrawn from their ordinary pursuits, save occasionally for drill or for special and usually short service in the field. . . . They can not be used in offensive war on foreign soil" [*Jeffers v. Fair*, 33 Ga. 347-49 (1862)]. In 1862 Governor Brown refused to allow the militia to leave the state, preferring to keep them at Savannah for local protection as a "monument to Georgia's sovereignty."

The constitutional right of the federal government to "raise and support armies" by volunteering or draft for oversea service is separate and distinct from the limited right "to call forth the militia" in cases of rebellion or invasion [*Cox v. Wood*, 247 U. S. 3 (1918)]. The congressional act of May 27, 1908, empowering the president to call out the militia for service within or without the borders of the United States

when such service is deemed necessary was promptly declared unconstitutional by the attorney general (29 Ops. Atty. Gen. 322). Nevertheless, and despite the theoretical validity of this distinction, exigencies of military emergency have often necessitated the utilization of militia units for foreign campaigns. Man power is man power. If organized and trained it is likely to be used. Popular excitement transforms home troops into oversea campaigners. During the Napoleonic wars the British Parliament passed special acts permitting the militia to go to France under their own officers. In the Crimean War British militia garrisoned not only home forts but also some in the Mediterranean, releasing regulars for service in Russia. A fifth of the British militia went to south Africa in 1900 as separate volunteers, just as American militiamen volunteered for Mexico in 1846 and for Cuba and the Philippines in 1898. In 1918 American militia, "federalized," were in the vanguard of American troops arriving in France.

In 1871 British militia control passed from counties to the crown, and ten years later the militia was affiliated with line regiments save for limitations on service. In 1908 organized British militia practically disappeared, although the legal obligation to service in time of emergency persisted in theory. Since the World War the territorial army recruited in the counties and officered by graduates of officers' training corps functions as a voluntary militia for service abroad as well as at home.

In 1903 the American militia was allied to the regulars, but tradition triumphed and the alliance was loose. Two years after the World War the United States recreated state units with local controls and loyalties and flatly refused to form a "national" militia. The older term "militia" has tended, however, gradually to disappear, being replaced by "National Guard." Volunteer state units persist with training supervised, arms provided, pay for drill nights furnished, by the federal government. They are frequently called by their own states for short service to prevent lynchings or to subdue strike disorders when local police seem impotent. They are said to form a "component" of the army of the United States, are brigaded into the vaster organization, urged to accept federal reservist obligations in addition to state obligations and considered as early available troops in many mobilization plans. But despite these adaptations of an older institution to the demands of a more intricate system of military administration the ancient

Anglo-Saxon ideal of armed citizens under local control is still operative.

ELBRIDGE COLBY

See: ARMY; WAR; MOBILIZATION AND DEMOBILIZATION; ARMED FORCES, CONTROL OF; CONSCRIPTION; MERCENARY TROOPS; MILITARY TRAINING; NATIONAL DEFENSE; STATES' RIGHTS; REGIONALISM; MARTIAL LAW; POLICE; ARMS, RIGHT TO BEAR.

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MILK SUPPLY. Milk is an indispensable item in the diet of infants and many adults. Thus an adequate supply of pure milk is a matter of public concern, particularly to urban dwellers.

Milk, however, is one of the most perishable of foods, and scientific research has shown the potential danger of milk as a carrier of disease when not produced and handled under sanitary conditions. In 1842 Robert M. Hartley suggested that unsanitary and adulterated milk was an important cause of the high infant mortality in cities of the United States. Even though many regulations and sanitary measures have been adopted, state health officers during the years 1924 to 1929 reported 258 epidemics of disease caused by contaminated milk, resulting in 10,906 cases of illness and 371 deaths.

The milk problem was not serious when most of the population lived on farms or in small towns and villages. Milk was provided by the "family cow" or obtained from nearby producers. With the growth of large cities, however, the problem of obtaining a satisfactory supply of milk increased.

The first shipment of milk to New York City by rail is reported to have been from Orange county in 1842. At that time the major part of the city supply came from dairies in or near the city, where a low standard of sanitation prevailed. Massachusetts took the lead in enacting regulations to improve the milk supply. In 1856 it prohibited adulteration; in 1859 it prohibited the feeding of distillery waste. It was not, however, until 1882 (in Newark, New Jersey) that specific legislation for dairy inspection was passed.

Since the milk supply problem is most acute in large cities, municipal legislation shows the trend toward regulation and control of the milk supply in order to protect the public welfare. In New York City beginning about 1873, when Dr. Jacobi advocated pasteurization as a hygienic measure, private agencies and individuals carried on a steady campaign for clean pasteurized milk despite the opposition of dairy interests. The work of Nathan Straus, who established milk stations for infants of poor families in New York City, was of great significance in this movement. In 1896 the regulations of the New York City Board of Health, which had been concerned only with the detection and prevention of adulteration, were amended, giving a more comprehensive definition of adulterated milk and providing for the sale of milk through a system of special permits. In order to improve the sanitary conditions under which the city milk supply was produced and handled, a system of inspection of dairy farms and country milk plants was started in 1906. In 1911 the

city regulations were extended to include a definition of pasteurization and a system of grading milk according to bacterial content, butter fat content and methods of production. In 1926 there was instituted a rigid enforcement of the requirement that all Grade B milk be pasteurized, and finally in 1931 the Milk Commission of New York City recommended prohibiting the sale of unbottled milk to consumers.

The gain in hygienic conditions is indicated by the fact that in 1906 only 5 percent of the milk consumed in New York City was pasteurized as compared with 98 percent in 1921. Public regulation in other large cities has followed similar lines. In small cities and rural areas requirements for pasteurization have lagged. There is a lack of uniformity in state and municipal ordinances with regard to standards for milk and cream which often results in the diversion of low quality milk to the municipality with the lower standard.

The federal government has supplemented municipal and state regulation. The Food and Drugs Act, first enacted in 1906, contributed only slightly to federal inspection of milk or cream and to the development of uniform standards. In 1923, at the request of the Alabama State Board of Health, the United States Public Health Service initiated a milk sanitation program which was soon adopted by other sections of the country and which led to the formulation of a standard ordinance in 1926. In August, 1931, the ordinance was in operation in 442 municipalities located in 25 states, but it was estimated that a large amount of the milk sold in the United States failed to meet its requirements. In 1927, because of the large imports of fresh milk and cream from Canada, the Lenroot-Taber Act was passed requiring inspection of Canadian dairies and plants shipping milk to the United States. Increased tariff rates and heavier production in the New York and Boston areas curtailed imports of fresh milk and cream, which dropped from 30 percent of the total imports of dairy products during the ten-year period 1921 to 1930 to 2 percent in 1931.

As a result of higher standards of quality and sanitation, improvements in transportation and refrigeration, and educational campaigns by state and federal health departments, child welfare institutions and the dairy industry there has been a marked increase in the consumption of milk. For New York City the per capita increase over 34 years (1890-1924) was 85 percent, and only recently, because of the economic

depression, has there been any marked decrease. The average annual milk production in the United States in the 3 years 1929 to 1931 was estimated at 103,000,000,000 pounds, 32 percent being used as fluid milk and cream by the non-farm population; about 25 percent was used on farms and 43 percent in the manufacture of dairy products, exclusive of farm butter. During the years 1924 to 1930 the gross farm income from milk averaged \$1,865,000,000, or 16 percent of the gross farm income from all crops and livestock combined.

The consumption of milk varies widely, by geographic regions, by nationality and by income. In 1931 the daily per capita consumption of milk in cities and villages in the United States was estimated at .88 pints per day. In the north Atlantic states it was .99 pints per day, in the north central states .92 pints, in the south Atlantic states .65 pints, in the south central states .68 pints and in the western states .87 pints. A study of the consumption of dairy products in Boston indicated that per capita consumption of milk was highest in Irish, German, native white, English and Scotch and Jewish families. The lowest per capita consumption was in Negro and Italian families. Some studies have indicated a relationship between milk consumption and income. In Austin, Texas, the per capita consumption in the highest income group of the white population was 50 percent greater than in the lowest and two and one half times as much as for the colored population. The Children's Bureau has estimated that about one third of the children in the United States are undernourished because of lack of milk. The New York State Milk Commission in a survey made in 1930-31 of 31,500 poor families, including 89,500 children, found that 51 percent of the families used unbottled milk. Since the depression beginning in 1929 there has been a shift from bottled to loose milk, a lowering in grade and also a decrease in quantity used.

In isolated regions and in army, construction, mining and lumber camps, dried milk and evaporated milk are used to a large extent instead of fresh milk and cream. Marco Polo mentions the use among the Mongols during the thirteenth century of dried milk prepared by a heating process. Condensed milk and evaporated milk were introduced into the United States in 1857 and used extensively during the Civil War. The manufacture of dried milk in its modern form is largely a development of the twentieth century. The consumption of condensed and evap-

orated milk is relatively small as compared with that of fresh milk and cream. In 1930 the per capita consumption of condensed and evaporated milk on a milk equivalent basis was 36 pounds compared with about 350 pounds of fresh milk and cream. Of the total amount of milk used in the manufacture of dairy products in the period 1921 to 1930, condensed milk required about 1 percent, evaporated milk 6 percent and powdered whole milk, powdered cream and malted milk less than .5 percent.

Per capita consumption of milk is highest in Finland, Switzerland and Sweden and lowest in Chile and Japan.

PER CAPITA CONSUMPTION OF WHOLE MILK PER YEAR
IN VARIOUS COUNTRIES

COUNTRY	YEAR	GALLONS
Finland	1928	83.9
Switzerland	1927	70.4
Sweden	1914	69.7
Norway	1927	56.0
Canada	1927	51.0
Czechoslovakia	1928	45.8
Austria	1926	45.0
Netherlands	1927	42.7
United States*		
non-farm population	1931	40.0
New Zealand	1927	37.4
Australia	1926	37.1
Great Britain	1927	23.0
Germany	1928	27.3
France	1928	25.0
Denmark	1927	22.0
Spain	1925	13.8
Chile	1927	7.2
Japan	1926	0.4

* United States, Department of Agriculture, *Milk and Cream Consumption in Cities and Villages* (mimeograph release, December 8, 1932).

Source: White House Conference on Child Health and Protection, Sect. II, Public Health Service and Administration, *Milk Production and Control* (New York 1932) p. 261.

In general it is true that no other country has approximated the high standards and proportion of pasteurized and bottled milk and delivery service of the United States; Great Britain and Denmark rank highest in Europe. Pasteurization is not compulsory in London. In Germany about 30 percent of the milk is pasteurized; the proportion varies with the size of the city. In Berlin 99 percent is pasteurized and special regulations are enforced for the handling of infants' milk, which amounts to about 3 percent of the total city consumption. In Germany double pasteurization of milk is common, in contrast with the United States, where double pasteurization is prohibited. The lowest standards of regulation and pasteurization prevail in Paris;

recent complaints that at least 45 percent of the milk supply is adulterated have led to a campaign for a better system of control.

With the growth of urban population and increased per capita consumption, city distributors have had to reach out farther and farther for sources of supply. In New York City in 1927 only 63 percent of the approved Grade A and Grade B milk was received from plants within the 300 mile freight zone; some shipments came a distance of 500 miles. No other city has such a wide radius of supply. For London it is 300 miles and for most of the other large cities decidedly less. In recent years truck shipment has supplemented that by rail. This is especially true for short hauls, where transportation costs by truck are only 60 to 70 percent as high as by rail. Over half of the milk receipts at Philadelphia in 1929 were truck receipts. In European cities, where short hauls are more common, the truck is a still more important factor. Improved roads and the replacement of horses by motor vehicles have increased the distance that milk can be economically delivered to plants. Because of this development it has been found advisable to discontinue many country plants.

Since milk is an essential food and perishable, it is necessary to have an adequate supply each day in the year. Seasonal shortages and surpluses in city milk supplies are due in the main to the wide seasonal variation in production. The public will not tolerate a sharp rise in prices even in cases of shortage. Even at stationary prices, demand for fluid milk and cream is affected by holidays, by the day of the week, by temperature and by the vacation movement from cities. Supplies also vary from day to day. With these variations in demand and supply dealers in some markets prefer to have a surplus over fluid needs of about 20 percent. Under current health regulations it is more expensive to produce and handle milk suitable for fluid use than for manufacturing use; and milk used for fluid purposes returns more money than that used for manufacturing purposes. Milk in excess of fluid requirements can be sold only in manufactured form in competition with products produced at lower cost.

Another important factor affecting the shortage and surplus of milk is the cycle in prices of dairy cattle, which is 14 to 16 years long. The price of dairy cows at the peak of the cycle has been about 50 percent higher than in the periods of low prices. When prices of cows are high,

farmers raise too many heifers; when prices are low, they raise too few. The shortage of milk in the New York milk shed in the fall of 1927 and 1928 was a result of raising too few heifers when cattle prices were low.

Milk production is affected by the relationship of milk prices to feed prices. When milk prices are high in relation to feed prices, farmers tend to feed more heavily and milk production is increased; when milk prices are low in relation to feed prices, they tend to curtail feeding. For some areas milk production tends to lag about 8 months behind the milk-feed ratio.

Regulations of city boards of health as to the care and handling of milk in order to insure a safe supply make the capital cost of retail distribution high and tend to concentrate the distribution in the hands of a relatively few organizations. In Detroit, Michigan, prior to the enforcement of the pasteurization ordinance there were 158 milk dealers; three months after the ordinance became effective there were only 68 plants.

Because of the concentration of city distribution into relatively few hands, farmers have little choice of markets for their milk and in many instances have found it advisable to organize for collective bargaining. One of the first organizations of producers was set up in Orange county, New York, in March, 1883, and in the same year waged a milk strike. The majority of the producers' associations, which in 1928 marketed about two fifths of the milk sold, were of post-war origin. By virtue of their bargaining strength and their successful use of strikes between 1916 and 1920 some producers' organizations became involved in legal proceedings because of their alleged violation of the antitrust acts. With the passage of the Capper-Volstead Act of 1922 it was made plain that producers are free to act together along normal business lines in the collective handling, processing and marketing of their agricultural products, with respect to interstate or foreign commerce.

The National Cooperative Milk Producers' Federation formed in 1917 was instrumental in the passage of this act. This organization, which in 1928 included 45 of the largest cooperatives, does not engage in business but is active in disseminating information and in working for legislation favorable to its membership.

There are in general two types of producers' cooperatives—bargaining associations and marketing, or operating, associations. Most of the producers' cooperatives were organized origi-

nally as bargaining associations to serve as intermediaries between farmers and dealers in matters of price adjustment. In 1928 bargaining associations were to be found in Boston, Hartford and other Connecticut cities, Philadelphia, Pittsburgh, and Baltimore. The advantage of this type of organization, which as a rule does not actually handle the milk, is that it requires a small amount of capital; on the other hand, it has no centralized control over its membership. The second type, the operating, or marketing, association, handles all or part of the milk, often engages in manufacturing and in some cases retails milk. Such cooperatives, which require large amounts of capital, are represented by associations in New York, Cleveland, Cincinnati, St. Paul and Minneapolis and are also typical of some European associations. These associations vary greatly in size. The largest, the Dairymen's League, Inc., had about 52,000 members in 1932 located in New York and five adjoining states. Producers' organizations in the United States have not been generally successful in retail distribution because of the high capital requirements and keen competition; it is estimated that they do less than 1 percent of the retail milk business in the United States.

Various price plans have been developed to facilitate bargaining between producers and distributors. The first price plan used was a flat price system, in which one price was paid for all milk received and no allowance was made for the fact that some dealers sold a larger proportion for fluid use than others and therefore received a higher average return. With the decline in 1920 in the price of manufactured dairy products, those distributors who had a large volume of surplus pressed for a change. During the period 1920 to 1923 many price plans were adopted, which may be classified into three general types: the classification, or use price, plan, the basic surplus plan and the combination price plan.

Under the classification plan milk is sold to distributors and manufacturers at a series of prices based upon the market returns from the milk from each use. Returns from the sale of milk at the different prices are pooled and an average price is determined for all milk sold. Under the basic surplus plan the producer receives a relatively high price for a certain uniform production of milk and a lower price for the surplus over the uniform production, thus offering a price incentive to maintain a uniform production. The combination price plan at-

tempts to combine the features of the other two: each distributor buys milk on a classified basis, while different prices are paid producers for basic and surplus milk. These plans or variations of them are employed also in European cities.

Milk is sold at retail through both the delivery wagon and the store, and in some cases the difference in price is as much as 2 cents per quart. A classification of sales of milk in February, 1927, of a group of dealers in the New York metropolitan area showed that 54 percent of the milk was sold in bottles on retail routes and 9 percent in bottled form to stores. The remaining 37 percent was sold in bulk, 19 percent to stores to be resold as dipped milk and 18 percent to restaurants and hotels.

Since milk is so essential as a food, retail milk prices are of public interest and the subject of much discussion. Brown's studies in Chicago for the year 1925-26 showed that the consumers' purchase price per quart averaged 12.9 cents. The cost of the milk to the distributor was 5.3 cents, or 41 percent of the retail price, leaving a gross margin of 7.6 cents, out of which 7.1 cents went into processing and sale. In 1925 the average price to the consumer in New York and Pittsburgh was 14.4 cents. Of this 5.7 cents, or 39.6 percent, went to the producer; 2.25 cents, or 15.6 percent, to the receiving plant and for pasteurization and bottling; 1.85 cents, or 12.8 percent, for transportation charges; 4.2 cents, or 29.2 percent, for sale and delivery, leaving a net profit of .4 cents. The margin between producers' returns and retail prices is not a measure of marketing costs, because this margin is affected by the relative amounts of the milk used for fluid use and for manufacturing use. The margin is affected also by the distance the milk has to be shipped. The increase in sanitary requirements and in distributive services has tended to widen the margin.

Many proposals have been made for a better organization of the milk industry. It has been argued that, because of the public need for a regular supply of milk at reasonable prices and the necessity of assuring its purity, the milk business should properly be considered as a public utility. There have been at least two experiments in this direction. The city of Portland, Oregon, passed an ordinance in September, 1931, requiring milk dealers to file prices with the city auditor as well as to give seventeen days' prior notice of any intent to change prices. In 1932 the province of Manitoba, Canada,

authorized the Public Utilities Board of the province to control the buying and selling of milk in case producers and distributors could not agree upon a fair price. Municipal ownership and operation has been proposed but has not yet been tried in the United States or Canada. Another suggestion has been the formation of a privately owned but publicly regulated monopoly. Since it would involve government fixing of prices and profits, this plan has not been received with enthusiasm in the United States, although from 1914 to 1919 at least ten such proposals were made by official committees set up to study the problem. In Germany, partly as an outgrowth of wartime government control, many cities have entered the field of wholesale distribution by establishing "stations" for fluid milk. Ownership may be either wholly municipal or vested in a mixed corporation in which the city owns a share.

In addition proposals have been made for the zoning of cities to eliminate duplicate routes and organization of consumers. Consumers' organizations have not been as successful in the United States as in some foreign countries. A form of public control often discussed in periods of crises in the industry is the establishment of milk arbitration boards to fix prices and standards. In February, 1933, a bill was introduced in the New York state legislature providing for the setting up of a milk control board with plenary power over the supervision and regulation of all phases of the milk industry including production and sale, thus protecting the interests of the consumer without eliminating private enterprise. Similar measures are being discussed in New England and in the middle west.

EDMUND E. VIAL

See: DAIRY INDUSTRY; AGRICULTURAL COOPERATION; FOOD INDUSTRIES, section on FOOD DISTRIBUTION; COMMUNICABLE DISEASES, CONTROL OF; CHILD, section on CHILD HYGIENE; NUTRITION.

Consult: White House Conference on Child Health and Protection, Sect. II, Public Health Service and Administration, *Milk Production and Control* (New York 1932); United States, Department of Agriculture, "The Outlook for the Dairy Industry and culture," *Some Essentials of a National Dairy Program*, Miscellaneous Publication, no. 124 (1931); Kelly, E., and Clement, C. E., *Market Milk* (2nd ed. New York 1931); Erdman, H. E., *The Marketing of Whole Milk* (New York 1921); United States, Department of Agriculture, "Cooperative Marketing of Fluid Milk," by Hutzler Metzger, *Technical Bulletin*, no. 179 (1930); Bartlett, R. W., *Cooperation in Marketing Dairy Products* (Springfield, Ill. 1931); New York City, Department of Health, Milk Commission, *Is Loose Milk a Health Hazard?* (New York 1931); Cornell Univer-

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MILL, JAMES (1773-1836), British writer and philosopher. Mill was the son of a Scottish shoemaker and was educated at the University of Edinburgh. Licensed as a preacher he manifested slight interest in this calling and in 1802 he went to London in the company of Sir John Stuart, a member of Parliament from Scotland. After some years of struggle to support himself and his growing family by literary work on political and economic subjects Mill gradually attained recognition. In 1808 he became ac-

quainted with Jeremy Bentham, a fact which was of primary importance for the careers of both men. Mill's long visits at Bentham's country house gave him the opportunity to complete his large *History of British India* (3 vols., London 1817; 5th ed., 10 vols., 1856, vols. vii-ix by H. H. Wilson), which he had begun in 1806. The fame which he achieved through the publication of this work, the first ever to have been written on the subject, led to his being appointed in 1819 to a post at India House, where he remained for the rest of his life. But Bentham's friendship meant more than this to Mill, for it meant that he settled down at Bentham's side as his lieutenant and propagandist in chief, writing articles and pamphlets and making friends with all the leading reformers of the day. Bentham provided him with a doctrine, and he provided Bentham with a school.

Bentham before he met James Mill had been known in England as an unsuccessful philanthropist; as a law reformer he was known abroad only and this thanks to the exertions of his Swiss editor, Dumont. Mill now turned him again into an English writer and shifted Bentham's preoccupations from law and legislation to political philosophy. At the same time, particularly in his own version of Benthamite doctrine, Mill incorporated the economic teachings of Malthus and Ricardo, with the latter of whom he was on special terms of intimacy. It was under Mill's pressure that Ricardo wrote his *Principles* (1817); and Mill's own *Elements of Political Economy* (London 1821, 3rd ed. London 1826), which is noteworthy as the first English textbook on economics, is largely an interpretation of Ricardo's views.

Of fundamental importance for English political and social history was Mill's conversion of Bentham to an interest in political problems and particularly to the championship of universal suffrage. It was this conversion that was responsible for the formation of the powerful group, or coterie, of reformers known as the philosophic radicals, so called because their radicalism was consciously based upon an intellectual system, itself founded upon the ethical principle of "utility" and the psychological principle of the "association of ideas."

It was in the effort to clarify the psychological and philosophical base of the Benthamite doctrine of utilitarianism that James Mill published his *Analysis of the Phenomena of the Human Mind* (2 vols., London 1829; new ed. by J. S. Mill, 2 vols., 1869). Although the fundamental

ideas are derived from Hobbes and Hartley, the publication of this work marks the beginning of the modern school of associationist psychology.

Intellectually Mill was a borrower of ideas, not an original thinker. He was a lucid writer endowed with an indomitable Scottish will and a fanatical devotion to what he assumed to be the truth, and under his leadership there had arisen one of the most efficient groups of reformers which modern Europe has known. He had also, through years of methodical and strenuous teaching and training, aimed at and partially succeeded in giving to the world a living specimen of the perfect Benthamite—his son, John Stuart Mill.

ÉLIE HALÉVY

Consult: Bain, A., *James Mill* (London 1882); Morley, John, "The Life of James Mill" in *Fortnightly Review*, vol. xxxvii (1882) 476-504; Halévy, Élie, *La formation du radicalisme philosophique*, 3 vols. (Paris 1901-04), tr. by M. Morris as *The Growth of Philosophic Radicalism* (London 1928) p. 249-310; Stephen, Leslie, *The English Utilitarians*, 3 vols. (London 1900) vol. ii; Cannan, E., *History of the Theories of Production and Distribution* (3rd ed. London 1917); Mill, J. S., *Autobiography*, with introduction by H. J. Laski (new ed. London 1924).

MILL, JOHN STUART (1806-73), English social philosopher. He was the son of James Mill, editor, author, utilitarian and professional parent. He was educated at home; entered the India Office as a clerk in his late teens, serving as its chief from 1856-58; was later a member of Parliament for a single term of three years; and when the India Office was merged with another department he retired upon pension. Until his retirement his days went into his official work. In his twenties his leisure was given to promoting utilitarian and speculative debating societies and in writing for the *Westminster Review* and other periodicals. As he advanced in years a succession of studies concerned with man in his relations to society claimed his spare time. He never visited India; and his active contact with the world of affairs was from the desk of the civil servant and the seat of the philosopher.

Mill was, almost literally, the child of philosophic radicalism. He was, as few men of eminence are, the product of the deliberate educational craft of his father. He was exposed to only such aspects of the impinging culture as his father chose for him; his capacities were shaped into his personality through influences con-

sciously selected by his father. At unbelievably early ages he was introduced to the formal discipline of the classics, of algebra and geometry, of syllogistic logic and of speculative thought. In his teens he became well versed in all that English liberals were reading back into the literature of the ancient republics. He passed over Spenser and Shakespeare, was schooled to avoid books on theology as if they were fairy stories and steeped himself in the histories of the great Enlightenment. He was made acquainted, alike through his father's personal circle and the printed page, with the once heretical doctrines of Adam Smith, Jeremy Bentham and the Manchester school. His world was one of tomes, of pamphlets and of polemic; whatever the subjects of the books he read and however wide their range, they were all variations upon the same grand theme; to him they revealed the nobility of the social order which liberty guided by reason would make possible.

A ready made education is rarely a neat fit, and the elder Mill had taken no accurate measurements of the boy's latent capacities. A clash of some sort between the raw human stuff and the mold in which it was cast was inevitable. An emotional crisis came in the late twenties, from which John escaped by something much like "a Methodist conversion." In 1836 his father's death brought to him a measure of personal freedom. And his marriage in 1851, after the death of her husband, to Harriet Hardy Taylor, whose friendship he had cherished for twenty years, strengthened the force she exerted upon his thought. She had little influence upon the technical practise of his literary craft but much to do with his emotional attitude toward his subjects of study. Such influences made him sensitive to the amenities of existence and to spiritual values; they tended to humanize his mighty labors for the common good; but they came belatedly to a Mill who was already settled into his life. All the editing of opportunity, conflict and Mrs. Taylor could only revise the edition of himself of which his father was author.

Although he took up subject after subject as his interest dictated, Mill's great intellectual task was an inheritance. It was his sacred office to give definitive statement to the advanced thought of liberalism which was just attaining respectability. For this work he was well equipped by knowledge, conviction and a superb mastery of the technique of the system builder. So with utility as the guide, reason as the means and fundamental principles as the expression he

gathered up from far and wide fragments of thought and doctrine—from his father and Bentham and all the philosophical radicals, from Coleridge, from the classical economists, from Comte and Saint-Simon and de Tocqueville—and welded them into a comprehensive and articulate whole. Mill was no intellectual pioneer; but in an enterprise of this kind there is scant place for novel idea or startling hypothesis. As an intellectual structure his edifice is hardly comparable with that of an Aquinas or a Kant. But it served its cause well enough and stands today as the great literary expression of English utilitarianism.

It happens, however, that the man is mightier than the scholar. As Mill proceeds from book to book the integrity of his system is increasingly threatened by his own emotional convictions. He continually commits himself to advanced causes and policies faster than he can bring up his intellectual resources or find places for them in his system of thought. In the *Logic* he stands by "deduction," which to him has been the very way of thought, but tries to combine with it an "induction" which science and progress alike demand, and is powerless to effect the reconciliation. In the *Political Economy* he has really written two books, easily distinguished—the one an elaboration of the mechanistic scheme of Ricardo, the other an account of the diverse industrial usages under which peoples live. In the celebrated chapter upon the province of government (bk. v, ch. xi) he lays down the general principles of non-interference and smothers them beneath an avalanche of exceptions. The later and more matured essay *On Liberty* is the classic plea for individual freedom and the inarticulate confession of the necessity for control. The libertarian thought he expounded provided no basis for a resolution of the paradox of liberty and the state. In a half shelf of treatises, which stretches away from *A System of Logic*, by a man raised upon it, through political economy, representative government, the Irish question and woman suffrage to a series of *Essays on Religion*, by one who had always professed to overlook it, the diminuendo and the crescendo are quite apparent. In the pages of Mill the forces of disintegration are already present in a philosophy of utilitarianism which is receiving its authoritative statement. Mill set out to elaborate individualism into a system of thought and in the process became as much of a socialist as a pre-Marxian could be.

Against the kaleidoscopic background of hur-

rying events, this man of books who always dressed in black stands out as one of the most eminent of the Victorians. He conformed to the prevailing intellectual fashions, went in for system building, wrote in the grand manner and had so happy a command of his technique as to throw an adequate protective coloring about his thought. So compelling was his accomplishment that a full generation passed before inquirers dared again to address themselves freshly to the subjects upon which he had come to be an authority. It was not until the notions of "dynamics," growth, organism and the social process had blundered their way into the discipline with which he was concerned that his influence and prestige began seriously to wane. It would be easy to eliminate from his books the emotional commitments which produce confusion, and thus to make of these distinguished volumes the clear cut, logical, uncompromising, articulate statement of utilitarianism that Mill would have them be. But that would rob his contribution of its distinctive value as a document in the history of thought; and it would deny to Mill the man the authorship of his own works.

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Principal Works: *Autobiography*, ed. by John Jacob Coss (New York 1924) and by Harold J. Laski with introduction (London 1924); *Letters of John Stuart Mill*, ed. by Hugh S. R. Elliot, 2 vols. (London 1910); *A System of Logic, Ratiocinative and Inductive*, 2 vols. (London 1843, 9th ed. 1875); *Essays on Some Unsettled Questions of Political Economy* (London 1844, 2nd ed. 1874); *Principles of Political Economy*, 2 vols. (London 1848; new ed. by W. J. Ashley, 1909); *On Liberty* (London 1859, 3rd ed. 1864); *Dissertations and Discussions, Political, Philosophical and Historical*, 4 vols. (London 1859-75); *Considerations on Representative Government* (London 1861, 3rd ed. 1865); *Utilitarianism* (London 1863, 2nd ed. 1864); *An Examination of Sir William Hamilton's Philosophy* (London 1865, 5th ed. 1878); *Auguste Comte and Positivism* (London 1865, 3rd ed. 1882); *The Subjection of Women* (London 1869; new ed. by Stanton Coit, 1906); *Three Essays on Religion* (London 1874, 2nd ed. 1874).

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especially p. 148-70; Granati, A., *Ricordo e 7. S. Mill* (Bari 1921); Gonnard, René, "Stuart Mill et sa théorie de l'état stationnaire" in *Questions pratiques*, vol. xix (1923) 12-20; Hines, Norman E., "John Stuart Mill's Attitude toward Neo-Malthusianism" in *Economic History*, vol. I (1926-29) 457-84; See, Henri, "Stuart Mill et la proposition l'ouvrier" in *Revue internationale de sociologie*, vol. xxxii (1924) 606-19; Gehrig, H., "John Stuart Mill als Sozialpolitiker" in *Jahrbuch für Nationalökonomie und Statistik*, 3rd ser., vol. xlvii (1914) 176-201; Gotthelft, F. E., "Die sozialpolitischen Wandlungen von John Stuart Mill" in *Schmollers Jahrbuch*, vol. xli (1917) 1755-1836; Murray, R. H., *Studies in the English Social and Political Thinkers of the Nineteenth Century*, 2 vols. (Cambridge, Eng. 1929) vol. i, ch. x; Beer, Max, *History of British Socialism*, 2 vols. (London 1919-20) vol. II, ch. ix; Kennedy, G., *The Psychological Empiricism of John Stuart Mill* (Amherst 1928); Wentscher, E., "John Stuart Mills Stellung zur Religion" in *Archiv für die gesamte Psychologie*, vol. lxxvii (1930) 48-66; Adamson, J. W., *English Education, 1789-1902* (Cambridge, Eng. 1930) p. 302-09.

MILLES, THOMAS (c. 1550-c. 1627), British economist and customs official. Milles was born in Kent and entered public service about 1570. He was frequently sent to France, Flanders and Scotland and took part in the negotiations at Berwick in 1586. In 1579 he was made bailiff and from 1586 to 1623 was customer at Sandwich. Milles is the leading representative of the English bullionists. His chief work is *The Customer's Apology, that is to say a Generale Answer to Informers of all Sortes* (London 1601, abridged ed. 1602), in which he defends the staple system as preventing usury and permitting free enterprise and inveighs against the "particular companies and private societies." When Wheeler countered the attack in his *Treatise on Commerce* (1601) Milles issued *The Customers Replie or Second Apologie: that is to say, an Answer to a Confused Treatise of Publicke Commerce printed and dispersed at Middlebourgh and London in favour of the Private Society of Merchants Adventurers. By a more serious Discourse of Exchange in Merchandise and Merchandising Exchange. Written for understanding Readers only, in favour of all loyall Merchants and for the Advancing of Traffike in England* (London 1604). In this work he accused the merchants adventurers of practising "a meer foeneration" and a "temerarious alteration of public coynes, through corrupt and crafty exchanges and commutation of money." In 1606 he published *A Caution against Extremitie by Farmers and The True Use of Port-Bandes*, of which no copies have survived. In 1608 appeared *The Customers Alphabet and Primer. Containing their Creede, their Ten Commandements and*

Forme of Prayers. Together with a Pertinent Answer to all Such as would faine perswade others that the bringing home of Traffique must needs decay our Shipping. In this he also discusses taxes, preferring those which are "squared out to the generalitie, certaintie and indifferance of the lawes." In the same year he published *Acroamata (for Bullian and Staples) that is to say: Private Lessons speld out of a Customer's Late Alphabet and Primer.* In 1609 he reissued *The Customers' Apologie to be read more at large in Thesauraris Bodleyano Oxony. Heere only abridged, paraphrased and fitted into the written Table or Epitome of all his other Workes touching Trafficke and Customes.* In 1611 appeared *The Misterie of Iniquity plainly layd open by a Lay-Christian, no profest Divine, out of Truth in Humanity and Rules of Naturall Reason. Whereby the World may See, Read and Understand the Proud and Vaine Comparison of a Cardinalls Red-Hat and Kings Golden Crown. Alwayes provided in Reading, Read all or Read Nothing at all.* In this he laments that the old time "religious and honest collectors and customers" should now be "out of Favor, as objects of Disgrace and Publick Slaunder," and should be supplanted "through ignorance and impudency" by "Comptrollers, then by Supervisors lastly by Farmers and Undertaking Huxters, besides Searchers and Wayhers, God knowes how many." In 1612 appeared *An Out-port Customers Account of all his Receipts, wherein he plainly sets downe, as well the Motives and Occasions, as the Method and Style of all his former writings. All of which are heere fitted to Capacity of Common Sense and Reason. With an open Declaration of the Mystery, itself, to perfect this Account.* Finally in 1619 he published *An Abstract almost Verbatim with some necessarie Addition of the Customer's Apologie written 18 years ago to shew their Distresse in the Out-Ports as well as through want of Maintenance and Meanes to heare out their Service; as Countenance and Credit in regard of Others.* This was intended, as a manuscript note by the author states, "for an answer to the Merchants, Burgeesses for London at the last abrupted Parl. 1614," who "calls all men Enter-lopers that are not of their Conclaves or private Commonwealth."

EDWIN R. A. SELIGMAN

Works: Copies of some of Milles' works are to be found in the Bodleian Library at Oxford, in the British Museum and in the Seligman library at Columbia.

Consult: Hewins, W. A. S., in *Dictionary of National Biography*, vol. xxxvii (1894) 434-36.

MILLING INDUSTRY. Flour milling has been practised since primitive man spread his grain upon a convenient boulder and crushed it with a rounded stone. Grinding succeeded crushing when there was developed the saddle stone over which another stone, shaped somewhat like a rolling pin, was rolled back and forth. Milling assumed a still more modern form with the invention of the quern in about the second century B.C.: here two flattened stones were employed, the grain being crushed as the upper stone revolved upon the nether. A further step was the use of millstones in the slave and cattle mills of the Roman Empire: a cone shaped nether millstone was capped by a stone shaped somewhat like an hourglass, the upper half forming a hopper; these heavy stones were turned with long bars fixed into sockets in the upper stone and were propelled originally by slaves and later by horses or asses.

The Greeks are said to have invented the water mill, but its first known use for grain grinding can be traced only to the fifth century A.D. The earlier type of water mill had a horizontal water wheel; this was superseded in the eighth century by the more efficient vertical wheel. Probably at first the wheel was turned only by the current of the stream; later the fall of the water was utilized by means of flumes and dams. The "floating" mills of Europe and America were an example of the earlier method, while the "tide" mills, using impounded tidal waves, were an example of the latter. The windmill was apparently not used in Europe until the twelfth century.

Considerable capital was required for both windmills and water mills. In mediaeval Europe, in many instances, the monks erected the mills; in some cases the towns built their own. Most of the mills, however, were erected by the lords of the manors and were leased to the millers usually on the basis of annual payments; these constituted a considerable part of the noblemen's revenue. Mediaeval records indicate that the tolls were often very burdensome. In the thirteenth century both townspeople and peasants began to use hand mills openly, in spite of fines, confiscation of mills and even excommunication. Generally, however, the lords succeeded in keeping their privileges until the abolition of the feudal dues. The millers were too scattered to form guilds; but because of the indispensability of their product they were closely regulated by the lords or by the town government. In general, regulation was designed to fix the tolls, insure accurate weights and measures and prevent

adulteration. In the larger towns the bakers were often dominant, buying the grain and having it ground. In some cases the magistrates found it necessary to establish town granaries and to purchase grain in large quantities.

The English colonists in America who had brought no hand mills with them used crude mortars. In all the colonies there were passed laws to encourage mill building. Many windmills were erected but water mills proved more efficient and gradually superseded all others. At the end of the colonial period there was no neighborhood without its gristmill. Most of these were small and crude, containing no machinery other than the millstones and a single sifter; the majority operated on a custom basis, charging a toll for grinding the corn. In the middle colonies there were, however, larger merchant mills which bought their grain and sold the finished product. Those concentrated along the Brandywine and Wissahickon creeks (near Philadelphia) had by 1750 reached a high degree of technical excellence. Buhrstones were imported from France. New machines were developed to clean the wheat before milling. Sifting was done more carefully, silk bolting cloths being used first by the Brandywine millers. About 1795 the latter installed the first of Oliver Evans' new machines, which carried the mechanization of the mill almost to the point reached in modern times.

As a result of Evans' inventions the industry moved into the towns; production grew to a large scale, becoming concentrated and localized. Changes in wheat production contributed to this development. Just before the Civil War the white wheat of the Atlantic coastal plain began to be superseded by the soft red winter wheat of the Ohio valley; after the Civil War the hard red spring wheat of the northwest suddenly gained favor, being followed a generation later by the hard red winter wheat of the southwest. Each of these changes brought shifts in milling leadership. Just after the revolution Baltimore was the chief center; about 1820 Richmond and Rochester gained preeminence; after the Civil War St. Louis and Minneapolis held leadership in turn; while in recent years Buffalo and Kansas City mills have expanded most rapidly.

New wheats also have been an important factor in the development of new milling methods. From 1795 to 1870 the only major advances were better wheat cleaning methods and the rise of steam power mills. From 1870 to 1890, however, significant changes took place. The introduction

of the purifier about 1870 made possible a pure white flour from hard wheat and gave leadership to the mills in the spring wheat area. The roller mill, introduced a few years later, brought in the modern system of grinding. Although neither of these was an American invention, American millers, particularly those at Minneapolis, took the lead in applying them and reaped the greatest benefits. They were able to do so because they had developed large scale production and concentration of ownership, perfected a marketing organization which brought the grain of the whole northwest to their mill doors, and pushed the building of railroads eastward toward the great consuming centers and westward into the wheat areas. Meanwhile they had established powerful banking connections to finance their wheat purchases. C. A. Pillsbury and Company (organized in 1874), later the Pillsbury Flour Mills Company, the Washburn-Crosby Company (organized in 1879) and the Northwest Consolidated Milling Company (organized in 1891) were the three leaders of the industry in the northwest.

After 1890 there were no great changes in milling machinery. Newer and larger mills gave more attention to sifting and the sifting process became more complicated. Machines were introduced to clean smut from wheat; sack sewing machines and conveyors reduced the labor involved in the packing of flour. After 1900 the light and flimsy wooden structures which housed many large mills were replaced by modern buildings of brick, stone or concrete. The greatest change in milling after 1890 was the adoption of wheat and flour testing. Wheat brought in from ever wider areas varied greatly in composition. Large scale buyers now demanded uniform quality of flour. Competition among millers made necessary an economical wheat mixture. For these reasons scientific wheat testing became the rule and wheat was no longer purchased according to a grade based on external indications alone but rather on a protein test. The larger mills acquired laboratories and came to be laboratory controlled.

At the same time the miller learned how to cut production costs by artificial bleaching, a process which shortened the storage time of the flour. Although the consumer demanded a very white flour, the regulating authorities in some of the states and at Washington became convinced that artificially bleached flour was unfit for human consumption and tried to prevent its sale. This led to the introduction of a variety of dark

bread, largely through the grinding of rye flour and corn meal. The increased use of macaroni products and breakfast foods produced the same effect. But the effort to bar the bleached flour from interstate commerce failed and today the miller may bleach artificially provided the flour is not overbleached so that quality is impaired or inferiority concealed. In recent years white flour has been attacked on other grounds, chiefly because it is said to be less nutritious than whole wheat flour. The millers deny this charge and apparently they have some scientific support. But popular prejudice, together with the increasing variety of foods in the modern diet, has caused a decline in the use of white flour.

Since the World War the chief change in the industry has been the decrease in importance of the northwestern mills. Two causes have been largely responsible: first, the general rise in railroad freight rates, which has brought about the decentralization of the industry, so that the large Minneapolis companies have built or acquired mills in other sections of the country; and, second, the dwindling supply of high grade red spring wheat. Because of the latter the northwestern millers have had to pay a premium for their supplies from Canada in the form of tariff duties. Since Canadian wheat can be milled in bond for the export trade, Minneapolis millers have transferred this phase of their activities to their Buffalo plants.

The first gristmill was usually given a warm welcome by a frontier community. But the characteristic antagonism of the farmer toward the miller soon cropped up. In the period following the Civil War farmers accused the Minneapolis millers of monopolizing the wheat of Minnesota and refusing to pay fair prices; at a later date farmers charged the millers with being in league with elevator companies and commission men in the grain exchanges. State grain inspection (later to become national) and state regulation of terminal elevators ended this source of complaint; but the old feeling of hostility reappeared when farmers demanded and millers opposed the prohibition of trading in grain futures.

As late as 1919 there were more than 21,000 flour and gristmills in the United States; nearly half of these were small custom mills grinding for toll and producing for the most part feed for farm livestock. Of the 10,000 merchant mills more than half ground less than a thousand barrels of flour annually. Thus the industry is scattered and dispersed; but there is also, as has been said, a tendency toward concentration. The bulk

of the wheat flour is produced in a few states; in 1923, for example, the Minnesota mills produced one fifth of the country's output and the Kansas mills almost one seventh. Concentration in the hands of a few large companies is also a characteristic of the industry; in 1921 five companies, operating forty-nine mills, were responsible for nearly one fourth of the total national output.

The first national trade organization of millers, the Millers' National Association, was formed in 1873 in order to direct and unify the fight against the claimants for purifier patents. At the same time local associations were being set up to control neighborhood wheat supplies or to force favorable railroad rates. State associations also made their appearance for the purpose of promoting the establishment of mutual fire insurance companies and uniform wheat grading and inspection. In the following decades the national association concerned itself largely with the problems of flour adulteration and the building up of the export trade. Since the export millers were dissatisfied with results achieved, a new national association, the Millers' National Federation, was organized. This body also occupied itself with railroad rate and service matters as well as with the securing of more liberal drawbacks on export shipments and the advocacy of reciprocity with Canada, Cuba and other countries. During the World War the federation became a means of contact between the millers and the federal government. Since then it has concentrated on developing foreign markets and carrying on the usual trade association activities—the collection and distribution of statistics of output, shipments, prices and stocks in hand. An important achievement has been the preparation of a uniform cost accounting system for the industry.

The labor problems of flour milling have always been of comparatively slight importance, principally because the labor force of even the larger mills is quite small. In 1919, for example, out of 10,708 merchant mills in the country only two employed more than 1000 men and only ten employed more than 250 men, while 9400 mills employed 5 men or fewer. Trade unionism has not been strong in the industry for this reason; another contributory factor is that most of the operations can be performed by unskilled labor. Only in the chief milling companies have the workers been numerous enough to form unions. For a time after 1897 the International Union of Flour and Cereal Mill Employees made rapid progress in organizing the mill workers on a craft

basis, but a disastrous strike in the Minneapolis mills in 1903 broke the organization. Again in 1917 and 1918 there was a revival of unionism, this time on an industrial union basis and under the aegis of the International Union of United Brewery, Flour, Cereal, and Soft Drink Workers; but this venture also was short lived. The larger companies seem to have combated the growth of the movement by forming company unions and shop committees and by an organized program of welfare work.

For the western millers New England and the middle states have always been the chief markets. In the early days selling was mainly by commission houses, to which the miller shipped on consignment; but as the market grew larger and more complex the flour broker appeared on the scene. The abuses of the commission trade led to the rise of the millers' agent as the chief mill representative in the market. By 1903, however, the miller was beginning to push his own products and was finding that many commission houses and jobbers had special brands, against which he had to compete. The millers began therefore not only to advertise their products but also to set up branch houses, from which they sent out salesmen direct to bakers, retail grocers and other customers. This movement reached its height about 1920; since then there has been a reaction in the direction of a greater resort to middlemen. In part this has been due to market changes, especially the growth of large scale baking. A generation ago the chief demand was for flour suitable for household baking. Since the World War, however, there has been a steady trend away from household baking toward bakery products. At the same time the development of more scientific methods and the increased mechanization of the baking processes have brought about the rise of great bakeries and of many baking chains and combinations.

Up to 1840 almost all American wheat exported was milled before being shipped; but during the next forty years flour exports, while they did not decline, fell behind wheat exports. Beginning, however, with 1880, there set in a great increase in flour exports, caused in part by progress in export marketing methods, in part by the technical improvements which produced a better flour but in the main by the fact that American millers were securing a superior type of bread wheat at very low prices. In recent years American flour has again slipped from its commanding position in the world trade. In the

United Kingdom, for example, new large scale mills have been able to compete on more equal terms with American mills. Canadian mills have steadily been cutting into American markets. Inequitable railroad and ocean freight rate structures have resulted in the supplanting of flour shipments by wheat. The inability of the north-western millers to obtain high grade home grown wheat at a price low enough to permit competition in foreign markets has been another factor. The recent European high protective grain and flour duties and the requirements for the mixing of a given proportion of domestic with foreign wheat or flour have likewise contributed to this situation.

The chief European markets for American flour in recent years have been the United Kingdom, the Netherlands, Denmark, Germany and Norway. In all of these countries American millers have been facing strong competition, chiefly from Canadian millers, whose spring wheat flour has a strength better suited for blending with local products than that of the American hard winter wheats. In addition domestic mills are becoming increasingly important. In the United Kingdom, for example, where more than half of the mills are controlled by the Co-operative Wholesale Society, Joseph Rank, Ltd., and Spillers, which produce 62½ percent of the total flour milled in the country, there is overcapacity in milling; the result therefore is importation of wheat rather than flour. The chief wheats used by the English millers are Canadian, Australian, Argentinian and American no. 2 hard winter. In Ireland efforts have recently been made to discourage flour importations because of the existence of local mills; the flour that does reach the country comes from English port millers. Scottish millers are compelled to meet the competition of Canadian mills; of American mills at Buffalo, which mill Canadian wheat in bond; and of English branch plants located in Scotland.

The millers of the Netherlands, who produce about three fourths of the flour locally consumed, depend largely upon the United States, Argentina and Canada for their wheat requirements. What flour is imported comes for the most part from the United States. In Germany before the World War German grown wheat was considered too soft for domestic baking needs and most of the wheat stocks were imported. But the exigencies of war compelled the development of a milling mixture made up entirely of German grain; this to a large extent has been the

post-war characteristic of German flour. Millers have been required by law to use a certain percentage of German wheat in all mill mixtures, this percentage varying from 40 to 70 percent depending upon the size of the domestic crop. In the post-war period there were approximately 27,000 mills in Germany, of which but 3000 were merchant mills. French mills, which more completely than any other European group utilize domestic grown wheat, have also been compelled by law to favor French grains in their milling mixtures; for a considerable length of time this proportion has been as high as 97 percent.

In Denmark locally grown wheat is used for livestock, with the result that the country imports both wheat and flour. Only from 35 to 45 percent of flour locally consumed is manufactured by domestic mills; the rest is furnished by Canadian and American millers. Sweden like Germany and France requires its millers to mix a specified percentage of domestic grown wheat with foreign stocks, and this proportion may run as high as 70 percent. In Norway the wheat, rye, barley and wheat flour trade is in the hands of a state monopoly which imports stocks for domestic needs through agents of foreign grain exporters and mills. Domestic millers are obliged to receive the grain at a fixed price and to grind it under instructions from the state monopoly; while millers may sell their products on their own responsibility, they must render a monthly accounting of sales. It is interesting to note too that the monopoly buys all the grain suitable for human consumption offered by local farmers. The price paid for home wheat is fixed at a somewhat higher level than that prevailing on imported wheat; also the price of flour is the same in all parts of Norway.

In the western hemisphere Cuba and Brazil have been the largest customers of American millers, although Argentinian mills are a strong competitor in the Brazilian market. American mills have been turning increasingly to the Orient as their chief outlet; China and the Philippines are now the best American markets in the East, and despite the competition in China from native, Japanese and Canadian millers Americans have succeeded in holding their own.

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See: GRAINS; GRAIN ELEVATORS; COMMODITY EXCHANGES; FOOD SUPPLY.

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MILNER, VISCOUNT ALFRED (1854-1925), British colonial administrator and statesman. Milner was educated chiefly in Germany and at Balliol College, Oxford, where he achieved high honors under the tutelage of Benjamin Jowett and acquired a permanent bent of mind in favor of national collectivism. His social idealism aligned him at first with reform movements;

but his early public career in Egypt and as chairman of the Board of Inland Revenue won him prestige as a financial administrator of outstanding ability. His most conspicuous activity was as high commissioner for South Africa from 1897 to 1905. Appointed to this post in the midst of passions released by the Jameson raid, Milner made the uitlander franchise the crucial issue in his task of securing British supremacy in south Africa. The Boer War followed his failure to achieve the franchise by negotiation. As the war proceeded to the extinction of Boer independence, Milner became administrator and later governor of the conquered republics. Assisted by a group of young Oxonians he undertook large schemes of social reconstruction involving educational reform, railway building, land settlement and restocking of farms. These measures were financed in part by a 10 percent levy on the net gold output of The Rand and with a minimum reliance upon private enterprise in their execution. On the other hand, Milner alienated British sentiment by introducing oriental labor for the mines in an attempt to build an economic structure independent of Bantu tribesmen. Milner's ulterior objectives were moreover irreconcilable with the rise of Afrikaner population at the cape. In the long run neither political nor cultural Anglicization has prevailed in south Africa, but Milner's efforts brought about an economic union which provided the basis for the Union of South Africa. During the World War Milner became, next to Lloyd George, the outstanding personality in the civilian administration of the British Empire; he completed his public career in 1921 after formulating the bases for Egyptian independence. In a revised edition of *England in Egypt* (London 1892, 13th ed. 1920) he reversed his earlier skeptical attitude toward Egyptian nationalism. His view of the empire as an organism he set forth in *Questions of the Hour* (London 1923, enlarged ed. 1925), in which he championed a mixed economic structure for Great Britain, to include elements of capitalism, state socialism and syndicalism.

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MILOVANOVIĆ, MILOVAN (1863–1912), Serbian statesman. Milovanović received his law degree at the University of Paris in 1886 and became professor of law at Belgrade University. He had a prominent part in the drafting of the Serbian constitution of 1888, which was at that time one of the most liberal in Europe; later, in 1901, he was one of the chief authors of the reactionary constitution which served only the personal interests of King Alexander and Queen Draga. He held successively the posts of under-secretary in the Ministry of Foreign Affairs, minister of justice and minister of commerce and industry.

Milovanović played a leading role in Serbian foreign affairs. He served as ambassador at Bucharest in 1900 and as ambassador at Rome from 1902 to 1907 and held the portfolio of Foreign Affairs from 1907 until 1912, in which year he was also prime minister. He won wide recognition for his reestablishment of diplomatic relations with England in 1906, for effecting a Serbian-Rumanian rapprochement and for winning Italy's diplomatic support for Serbia on all important problems including the Danube-Adriatic railway question and the Bosnian annexation crisis. He brought about the alliance of Serbia with the Entente and promoted friendly relations with Germany. One of his outstanding achievements consisted in pointing out to the forum of Europe, in connection with the Bosnian crisis, the essential meaning of the Serbian question, which from that time acquired a real and lasting significance. Another of his important accomplishments was the alliance between Bulgaria and Serbia in 1912, which Milovanović arranged despite very keen opposition in his own country and tremendous difficulties in Bulgaria; he was successful in this matter only because of the extremely strong pressure brought to bear by Russia. All this systematic work was preparatory to isolating and later fighting the Austro-Hungarian monarchy in the interests of pan-Serbism, of which Milovanović was a convinced exponent. It was to this end that he maintained connections with nationalist circles and encouraged their activities by grants of large sums of money.

MILOŠ BOGIČEVIĆ

MILTON, JOHN (1608–74), English poet and pamphleteer. After 1641 Milton took part in the attacks directed by the Roundheads against most of the prevailing political and religious institutions. Appointed Latin secretary of the Council

of State in 1649 by the victorious Independents, he dedicated his literary powers to defending the Commonwealth and to conducting the foreign correspondence. Blindness forced him to retire from public life, but once again on the eve of the Restoration he joined the fray in a trenchant protest against the return of the Stuarts. As events turned against him, he once more took up poetry and devoted the remaining years of his life to completing the three poems which the world has "not willingly let die."

Milton's reform pamphlets resulted in the main from his personal experiences. On leaving the university he abandoned his intention of entering the church, for he was repelled by the servility which seemed a prerequisite of ecclesiastical advancement. Accordingly in his first pamphlet *Of Reformation Touching Church Discipline in England* (1641) he pointed out the shortcomings of the Reformation in England and turned against those who from traditional, worldly or political motives wished to retain the unreformed system of bishops and ritual. In rapidly succeeding pamphlets he drove home his arguments regarding the highly controversial subject of ecclesiastical organization and creed. Provoked by the efforts of his adversaries to silence him through the press laws, Milton wrote his most renowned prose treatise, *Areopagitica* (1644), in which he denounced state interference with liberty of the press and pointed out the Catholic origins of censorship. An unhappy marriage had turned his attention to the problem of divorce and in several pamphlets, notably *Doctrine and Discipline of Divorce* (1643), he interprets marriage as a contract which if it prove unsatisfactory should be dissolved; his study of the Bible convinced him of the inferiority of woman. His experience as teacher of a small group of private pupils is reflected in his pamphlet on *Education* (1644), which sought to replace the traditional system of pedagogy with the new theories of Comenius; in place of the dull grind of Latin grammar he recommended a vital system of linguistic training and practical knowledge.

When Charles I was brought before his judges, Milton undertook to prove that the people had the right to try and to execute an unjust king. *The Tenure of Kings and Magistrates* (1649) advances the theories of the monarchomachs, bolstered according to the practise of the time with Biblical precedents. As an official rebuttal to the antirevolutionary ideologists Milton elaborated his democratic thesis in *Eikonoklastes* (1649),

Defenses of the English People (*Pro populo anglicano defensio*, 1651, and . . . *defensio secunda*, 1654) and in later pamphlets which systematically championed the republic as the best form of government. His much vaunted ideal of religious toleration, like that of Cromwell, applied within rather narrow limits and rigidly excluded Catholics on the one hand and the more radical nonconformists on the other.

Milton represents expansive Renaissance individualism coupled with Calvinistic austerity. In religion, ethics, politics and education he believed in responsible individual liberty, at least for the elect few. But his ideas were conditioned by his personality and his times. He claimed liberty for individuals like himself. When he encountered an obstacle to his own growth in society he demanded its removal. He reacted, for example, against humdrum education, but his system counted practically only with unusually gifted children. In ethics his personal individualism suggests affinities with Machiavelli. The elect minority had more ethical liberty than the "rabble." Milton was only one of the many pamphleteers of his age, and his writings are heavily colored by the spirit of the period in which he lived. It was only with Macaulay that the tradition set in which ascribed the essential spiritual conquests of the Puritan rebellion to Milton alone.

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MILUTIN, NIKOLAI ALEXEYEVICH (1818-72), Russian statesman. Milutin was an ardent advocate of the emancipation of the serfs on terms that would enable them to acquire land from the nobility with the aid of credit grants from the public treasury. With the advent of Alexander II peasant reform was placed on the order of the day and provincial committees composed of local nobility were organized in

1857 for the purpose of formulating reform projects. Two years later a special commission was charged with the coordination of these projects and the drafting of a general law for all of Russia. Milutin won a leading position in that commission and used his influence in combating the general tendency of the provincial projects to favor the interest of the nobility to the disadvantage of the peasantry about to be emancipated. Despite the bitter opposition of the representatives of the committees of the nobility he succeeded in increasing the portion of land to be acquired by the peasants as well as in reducing both the payments by them to the landowners for the use of the land pending its redemption and the amounts to be remitted by them to the public treasury in repayment of the credit extended to them in the course of emancipation. The concessions which he was able to obtain were subsequently greatly curtailed when the reform came up for final consideration at the Main Committee and the Imperial Council, on which Milutin did not serve; the final act granted the peasants less land than they had held and utilized under serfdom, while the price they had to pay for it was very high. Milutin also served as president of the commission which drafted the law establishing in the several provinces and districts elected bodies composed of representatives of all classes for the administration of local affairs. He endeavored to endow those institutions with the largest possible measure of autonomy and with a broad jurisdiction. Earlier in his career he had drafted a new law on self-government for the city of St. Petersburg, which widened the scope of municipal self-government introduced under Catherine II in 1785.

In 1861 immediately after the enactment of peasant emancipation less liberal policies gained the upper hand in the government and Milutin was induced to resign. Two years later Alexander II summoned him again and entrusted him with the enactment of an agrarian reform in Poland, then in the throes of an insurrection. Here he had an opportunity to carry out more fully his democratic ideals, inasmuch as the Polish noblemen were in no position to protect their interests, since it was precisely for the purpose of crushing their power that the agrarian reform had been undertaken by the government. Under the law of 1864 drafted by Milutin the peasants of Poland, unlike the peasants of Russia proper, obtained all that land which they had formerly had in use as serfs, and they

received it without payment or any redemption charges.

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MINIMUM WAGE. The demand for a minimum wage has been made by various groups with differing objectives. During the early period of industrialism the demand for state fixation of wages on the part of nascent labor organizations represents probably the last attempt to perpetuate the older idea of fixed and customary standards of living against the encroachments of modern capitalism. The nineteenth century *laissez faire* reaction against state regulation of private industry rejected alike legislation setting minimum wages (such as the French legislation of 1270) and the much more usual setting of maximum rates (typified by the famous English statutes of 1357 and 1536, which had fallen into disuse and were finally repealed in 1813). At the end of the nineteenth century, however, two streams of influence, the search for a device to protect helpless and unorganized groups, and the endeavor by states to regulate disputes between employers and workers, united to bring the concept of a state enforced minimum wage into new prominence.

The attitude of trade unions toward the state enforced minimum wage has varied from country to country and with economic conditions and the current strength of trade unionism. In general in periods of trade depression, falling prices and declining membership unions have favored legislative action even when as in Australia and New Zealand the fixing of a minimum effectively prohibits for the duration of the award any organized attempts to secure more than that sum. In England and the United States organized male workers are opposed to compulsory wage fixation. The attitude of strong unions toward such legislation for women and unorganized workers, except in America, where the greatest skepticism concerning government intervention has prevailed, has been one of approval tempered by the fear that it may weaken the chance of unionizing the groups affected. More recently, however, the demand for a high

state enforced minimum wage has been adopted by socialist groups, particularly in England and Germany, as a step toward elimination of profits and ultimate socialist control of industry.

Ever since the early nineteenth century the concept of a minimum wage has been part of trade union policy which, accepting the economic facts of capitalism, aimed at uniformity and standardization as techniques for protecting the standard of living of the worker. Every trade agreement is in effect an assurance that the members of the union if employed shall receive not less than the stated rate of remuneration, the minimum wage at the same time serving as an instrument for the elimination of substandard competition between workmen.

Prior to the end of the nineteenth century the only legislative regulation of wages was in the realm of government contracts where the state could exercise its power as a direct and indirect employer of labor. The so-called fair wages clause which was adopted in Belgium as early as 1855 and is now generally used in the awarding of public contracts provides that the workers should receive at least the rate of wages provided for in trade agreements or paid by reputable employers.

State enforced wage laws of varying scope now form part of the social legislation of practically all industrial countries and are in general of two types: specific legislation in the interests of unorganized and underpaid groups, such as workers in the "sweated" trades, women and minors, and regulation in the course of the settlement of industrial disputes through compulsory governmental conciliation or arbitration. Both types appeared about the same time, the latter in the New Zealand legislation of 1894, the former after a vigorous "antisweating" agitation in the Australian state of Victoria in 1896. At the present time the former type is represented in the English trade and wages boards, based on the Victorian precedent, in the legislation of certain states in the United States and of the Canadian provinces (except British Columbia) and in the homework legislation first enacted in France in 1915 and subsequently in other European countries. The latter type is characteristic of countries where compulsory conciliation and arbitration prevail, such as Australia, New Zealand and, more recently, Germany. The regulation of all wages in the Soviet Union falls outside the type of legislation characteristic of capitalistic countries.

Outside of Australia, New Zealand, Germany,

Great Britain and British Columbia the laws are in the main confined to women and juveniles because of constitutional difficulties, trade union opposition to compulsory arbitration and the fact that homework, where the need for wage regulation has been most widely conceded, in the main employs females. In Great Britain minimum wage laws cover a considerable proportion of the relatively lower paid and less well organized (including those in agriculture), while in Australia practically all trades in which disputes occur are subject to regulation by the courts. This was the case also in New Zealand up to 1932 but the almost complete removal of the element of compulsion by the act of April 8 of that year rendered uncertain the future scope of minimum wage legislation. Agricultural workers and those in domestic service are often excluded in practise or by explicit legal provision. In Hungary only agricultural workers are covered by minimum wage legislation.

In the United States the extension of minimum wage laws has always been hampered by constitutional challenges. Beginning with Massachusetts in 1912, fifteen states, the District of Columbia and Porto Rico enacted legislation applicable to women and children. Further extension has been entirely checked by the adverse District of Columbia decision in 1923, which reversed the favorable decision in the Oregon case of 1917 and was followed by similar decisions on the part of the Kansas and Arizona courts and by repeal in other states. In the remaining ten states, most of which are industrially unimportant, the continued existence of the laws depends upon the favor of employers; and administrators have proceeded with caution. In Massachusetts the absence of any penalty other than a limited publicity will probably preserve the law, while Wisconsin has hoped to obtain the same immunity by an amendment of 1925 providing for the prohibition of wages that are "oppressive." The legality of minimum wage fixation in respect to minors has been upheld by the Minnesota decision of 1925.

The growing importance of minimum wage legislation was recognized in the Treaty of Versailles, and in 1927 and 1928 the subject was discussed at the annual conferences of the International Labor Office. In the latter year a convention was adopted whereby the ratifying states agreed to fix minimum rates of wages for workers in poorly organized trades where wages were exceptionally low, and approval was accorded a recommendation setting out some generally

agreed principles regarding machinery and bases of wage fixation. By 1931 the convention had been ratified by eight states and the recommendation adopted by nine.

The machinery adopted has varied with the original objectives of state wage regulation. Where it has been mainly a by-product of the attempt to control industrial disputes, as in Australia and New Zealand, the most common machinery has been the court of arbitration consisting of one or a number of judges who may or may not sit with assessors. Very frequently provision is made for the appointment of conciliation committees or officers, who will endeavor to settle disputes and incidentally regulate wages without recourse to the courts but whose decisions may be declared legally binding. In practise the arbitration courts have dominated the situation because of their position as bodies of final appeal or recourse which alone are able to give legally binding decisions; and this dominance has been increased in Australia by the growing practise of requiring the central authority, whether a court or specially constituted body, to declare a basic minimum below which no other body may fix wages. Even in Germany, where the considerable degree of wage regulation that now exists is based upon a system of conciliation committees, the importance of the centrally appointed conciliation officers and of the Ministry of Labor, which has power to declare that agreements shall have nation wide currency, is on the increase and is likely to be enhanced by the emergency decrees of 1931. From time to time, as, for example, in South Australia and New South Wales, the arbitration system has been combined with wages boards set up for special industries. The boards, which enjoy a continuous existence but are subject to the overriding decisions of the arbitration court, are normally constituted of equal numbers of representative employers and workers together with an impartial chairman and sometimes a number of public representatives.

Where state wage regulation has been primarily motivated by a desire to raise wages of special groups or industries, the machinery has taken several forms. Occasionally, as in the laws of South Dakota, Utah and in the early anti-sweating legislation in Australia, the state will write into the law the exact amount of the minimum wage and specify the groups affected. This method lacks both adaptability and flexibility and is relatively rare. The second and more usual technique for fixing minimum wages in

the interests of underpaid workers has been the use of the wages board, constituted as described above. This device, used originally in Victoria and Tasmania, was subsequently adopted in Great Britain in the trade boards system and the agricultural wages boards and is the basic method in the American, Canadian and Mexican legislation and in the homework legislation of Germany, France, Norway and other European countries.

The degree of independence of these boards varies. In the United States and in South Africa they tend to be little more than special trade subcommittees of the general board charged with wage fixation. Elsewhere provision is made for appeal from their decisions to a higher authority, which may be, as in Great Britain, the Ministry of Labor or, as in Victoria, a specially constituted court, while in states with an arbitration system the boards are usually subject to the overriding decision of the central court.

Opinion differs concerning the relative advantages of these different methods of fixing minimum wages, but in general the tendency is to promote the use of conciliation or wages board technique as far as possible. Where more than one type exists, there arise difficult problems of coordination, which in Australia have assumed serious proportions because of constitutional limitations to the powers that may be exercised by the obvious centralizing authority, the Federal Court of Arbitration.

The problem of enforcement of the payment of minimum rates is less serious where trade unionism is strong, although where wage regulation has developed as a by-product of arbitration the presence of strong trade unions constitutes a new danger, since these are likely to attempt to obtain by direct action a wage higher than that fixed by the court. In general the administrative authorities have been reluctant to exercise their power to imprison or fine recalcitrant workers or employers, and the cancellation of the right of preference of employment is no penalty to a powerful union. Where trade unionism is weak, the main enforcement problem is one of maintaining an adequate inspectorate. There has been a general tendency to economize unduly in this respect.

The attempt by wage regulators to find some basis for wages other than that offered by the existing market situation has led to the emergence of three main criteria, according to which the wage should be respectively a living wage, a fair wage—that is, one equal to that received

by workers performing work of equal skill, difficulty or unpleasantness—or a wage which industry can bear.

In many cases the regulating authorities have been given little or no guidance from the legislative authorities. Thus except between 1928 and 1930 the influential Australian Federal Court has been left to evolve its own principles, as have the British trade boards and until 1918 the courts of New South Wales and New Zealand. The living wage is now prescribed in New South Wales, Western Australia, all the American states with wages boards and in certain Canadian laws; the fair wage, in Tasmania and in most of the European countries with homework laws. The payment of what the trade can bear was prescribed in the early laws of South Australia and Victoria but is now nowhere the sole criterion. Several laws, for example, those of Massachusetts, New Zealand after 1918, Victoria, South Australia and Queensland, prescribe more than one basis. In practise except where the laws apply only to homeworkers the living wage has come to be the most generally adopted basis for the wages of the unskilled, or lowest grade of workers; and above that the so-called secondary wage has been fixed by reference to the fair wages criterion, subject to downward revisions if the ability of the industry to pay is seriously questioned.

All three bases present problems. The specific content of the living wage is elastic; and although the Australian experience with the famous Harvester wage (fixed by Mr. Justice Higgins in 1907) suggests that a given wage once determined comes to possess a high degree of concreteness and to command general acceptance, the prevalence in South Africa of two very different living standards, the native and the white, has prevented the emergence of an agreed standard. With some reluctance wage regulators have faced the necessity for making periodic revisions in the money amount of the living wage to correspond with changing price levels, and discussion now turns on the appropriate index and frequency of adjustment. Differences in requirements due to the unequal size of workers' families have everywhere complicated the determination of an appropriate living wage, but in New Zealand and New South Wales the problem has been solved by the adoption of the family allowance system. The earlier question as to whether the living wage should vary from trade to trade has in general been decided in favor of uniformity. The problem of the unduly slow,

subnormal or infirm worker has been met by the general use of a system of supervised permits to employ such persons at less than the prevailing rates; but the attempt to prescribe a living wage for industries that operate irregularly over the week or year has raised hitherto unsolved difficulties.

Before 1914 the question of whether the living wage might not exceed the capacity of industry to pay arose only occasionally in individual industries because of the relatively conservative minima adopted, and the authorities tended to argue that an industry which could not pay the general living wage should go out of existence or receive a public subsidy. But after 1918 the more generous standards, which commanded general approval, raised the question in a more serious form and, acting either on formal legislative instructions or on their own initiative, wage regulators came more and more to consider the general level of productivity in the community as a whole and to argue that as this changed so should the content of the living wage.

In applying the fair wage principle regulators have been forced to take into account the relative importance of conditions other than wages in evaluating the relative rates of remuneration of different kinds of work, and when faced with the problem of a declining demand for some types of highly skilled work or by the rising wages of the unskilled they have tended to interpret the fair wage as that which will insure the desired supply of any particular kind of labor. The fixing of a wage that industry could bear was soon seen to involve in the case of individual industries an arbitrary choice as to the exact size of the industry which it was desired to maintain. The extension of the concept to industry in general has raised but not settled the problems of selecting the rate of wages appropriate to any particular level of productivity and discovering measures of "ability to pay."

Although there exist almost universal agreement as to the immediate and beneficial effects of minimum wage regulation on the workers involved and a claim that its enforcement has brought about improvements in industrial technique as well as the elimination of substandard competition based mainly on underpaid labor, there is much disagreement concerning the general economic effects of such regulation. Opponents point to the reduction of the differential between skilled and unskilled wages, to the evil effects of the protective tariff in Australia (which is held to have been necessitated by the high

wages fixed in manufacturing industry), to the high level of unemployment in Great Britain in the post-war years, to the alleged tendency of the minimum to become the maximum and to the hampering effect upon business of a system that involves minute regulation of industrial practices and rigid wage rates. Supporters of the minimum wage, on the other hand, urge that the reduced differential is a world wide phenomenon attributable in the main to a rising standard of education and a declining demand for skilled workers; they challenge the relationship in Australia between minimum wages and the tariff, claim that at most wage regulation in Great Britain bears but a small share of responsibility for post-war unemployment, point out that during the war in some countries regulated wages were even held below the level they might otherwise have reached and maintain that the relative fixity of the price of labor is not necessarily a disadvantage. Finally, they deny the implication that without regulation the individual worker normally receives much more than the going wage, affirm that the minimum tends to become the maximum only in times of declining business activity and assert that the alternative to a state regulated fixation of working conditions is an equally detailed regulation enforced by trade unions.

It is a difficult and still open question whether the wages of all workers can be permanently increased by the raising of the minimum. Nor can analysis of the general economic effect of minimum wages be isolated from the broader discussion of the forces influencing the determination of the general level of wages.

E. M. BURNS

See: WAGES; WAGE REGULATION; ARBITRATION, INDUSTRIAL; COURTS, INDUSTRIAL; LABOR LEGISLATION AND LAW; LABOR, GOVERNMENT SERVICES FOR; COLLECTIVE BARGAINING; TRADE AGREEMENTS; CONSUMERS' LEAGUES; COST OF LIVING; STANDARDS OF LIVING; FAMILY ALLOWANCE; CHILD, section on CHILD LABOR; WOMEN IN INDUSTRY; HOMEWORK, INDUSTRIAL.

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MINING

HISTORY, TECHNOLOGY AND ECONOMICS. Mining, narrowly speaking, means the extraction of crude ores and minerals other than building stone and their removal to the surface. From the social viewpoint, however, it is more useful to

think of the mineral industries as a group and include also the quarrying of stone and the production of oil and natural gas as well as the associated activities of milling or concentrating the crude mineral and of smelting and refining or otherwise preparing it for the market. In this broader view the metallurgical processes of reducing the crude ore to metal and the burning of cement, lime and the simpler clay products are all parts of the mineral industry. European usage and trade practise in the United States tend to classify them in this way.

From the viewpoint of use the minerals fall into two major groups, the power minerals and the raw materials, whose value output was roughly equal in 1929 (Table 1). Among the power minerals coal ranks much the highest, contributing 30.4 percent of the world total, while crude oil and natural gas supply 14.3 percent and 3.3 percent respectively. Of the metals by far the largest item is pig iron, which contributes 13.1 percent as compared with 17.3 percent for all other metals combined. The non-metallics, constituting 21.6 percent of the total, rank much higher than is generally realized and in point of value exceed either pig iron or "all other metals."

TABLE I
VALUE OF WORLD MINERAL PRODUCTION DISTRIBUTED
BY MAJOR GROUPS, 1929
(PERCENTAGES)

Power minerals (fuels)	48.0
Raw materials:	
Metals	30.4
Non-metallics	21.6
World total	100.0

Source: United States, Bureau of Mines, *Mineral Resources of the United States*, 1929, 2 vols. (1932).

In the United States the value of mineral products in 1929 was \$5,887,000,000, not including the values added through the refining of petroleum and the coking of coal, as compared with an average yearly output of \$426,000,000 in the years 1881-85; for the world as a whole the 1929 value was probably \$15,000,000,000. The mineral industry of the United States is smaller than agriculture or manufacturing but larger than fishing or lumbering, and in point of number of workers employed and value of products it is roughly equal to rail transport. But in some countries mining bulks much larger in the national life. In the United States one man in forty works in the mines, in England one man in ten.

Mining emerges before the dawn of history; the names stone age and bronze age chronicle

great forward steps in the utilization of flint, copper and tin. The first development was probably the alluvial mining of gold in the gravels deposited by rivers or postglacial floods. There was also alluvial production of tin; the tin output of Cornwall and Devon was almost wholly alluvial until the fifteenth century. Outcrop mining was the earliest source of copper, lead, silver and iron, found in veins in the rocks. Underground mining with shafts and galleries was, however, practised in many regions even before the iron age; it was in fact used in the stone age for the best quality of flints. Wooden shovels, picks, wedges and stone hammers were used to mine and break the ore; this was followed by the development of metal tools, the alternate use of fire and cold water to shatter the rock, drainage by adits and the beginnings of smelting. The ancient civilizations made considerable improvements in mining technology; thus in the Spanish mines the Romans improved drainage by use of the Archimedean screw pump, a rotating wooden cylinder containing a copper helix, and of the water wheel with boxes or buckets round its edge. Mines were sources of state power and revenue, objects of colonization and prizes of war. The Phoenicians, who traded extensively in ores, also worked the silver and copper mines of southern Spain, the possession of which was one of the chief stakes in the Second Punic War. Mines were often quickly exhausted, particularly under the leasing system, which resulted in unrestrained exploitation of labor and resources; the system was changed under the Roman Empire, the emperors asserting continually increasing claims to minerals until all mines came to be considered imperial property.

Mining declined during the early Middle Ages but revived in the tenth and eleventh centuries, and by the sixteenth century mining and metallurgy were well established in central Europe, particularly in Germany (the resources of which had not been depleted by the Romans), thus acquiring an advantage over other countries. Mining was intimately identified with the development of capitalism and of capitalist entrepreneurs. Merchant capitalists, such as the Fuggers, controlled and attempted to monopolize the mining industry of the Holy Roman Empire and of countries as remote as Spain; in Elizabethan England the preeminent speculator and entrepreneur, Sir Bevis Bulmer, was engaged primarily in mining. The technology and economics of mining moreover stimulated the

characteristic features of capitalist enterprise—wage labor, large scale production, the search for new sources of capital for expansion and various schemes for the control of production and trade in accordance with market requirements. This renaissance of mining encouraged and was stimulated by considerable progress in technology; one of the great advances was the development of screens, jigs and classifiers for concentrating the ore. The invention of gunpowder led to blasting and made possible the construction of longer drainage tunnels; but even with this improvement and despite the use of horse driven bucket gins or crude suction pumps, probably first introduced in Germany, the increasing depth of the mines rendered problems of draining so difficult that mining faced a seemingly impassable obstacle. At this critical juncture steam pumps, Savery's uncouth "Miners' Friend," were introduced in England at the beginning of the eighteenth century; and their subsequent improvement by Newcomen and Watt permitted work at much greater depths and practically initiated the modern system of mining. The industrial revolution, to which mining contributed by the impulse it gave to the development of the steam engine, accelerated the tempo of technological change in the mineral industries; some of the major advances were smelting with coke, the safety lamp, the hot blast in the iron furnace, the technique of drilling oil and gas wells, power rock drills, Bessemer steel, steel from high phosphorous ores, short flame explosives, the by-product coke oven and the cyanide process of extracting gold.

Significant as early mining development was to the life of the times, production was on a petty scale as compared with the present. Aside from the processes concerned with building stone, the operations in which the ancient world came nearest to the modern were the working of gold and silver. When Alexander captured Susa and Persepolis he seized treasure estimated at around \$190,000,000. Yet this amount, which represented hoards accumulated over a thousand years by the Assyrian, Babylonian and Persian empires, could be equaled by the Rand gold mines in eleven months' time. And the slag dumps of Laurium, whose mines were for three hundred years the principal source of silver, indicate a total yield barely equal to one year's production of the modern world. Even the accelerated rate of gold and silver production which followed the Spanish conquests in the New

World, while dwarfing all previous supplies, was small by present standards. The modern world is producing forty times as much silver and one hundred times as much gold as the world of the conquistadores and many hundred times as much iron or coal. As late as 1750, even after the use of coke, the total iron output of the western world was hardly 200,000 tons a year, an amount that would take the present world blast furnace capacity only sixteen hours to produce.

The significance of mining was enormously increased by the industrial revolution, which was in a real sense the mineral revolution. Probably more than 97 percent of the recent yearly output of minerals has come into existence in the last 150 years. From major dependence on materials of vegetable and animal origin the western world passed within a century to major dependence on the minerals. The shift that began with the coming of steam power and iron ships continues today in the displacement of animal by automotive transport which has swept North America and is now invading the rest of the world. What this change has meant is illustrated by the fact that while the production of the earth materials in the United States increased between three and fourfold from 1899 to 1929, the national cut of lumber remained approximately the same at the end of the period as at the beginning. During these three decades the growth of mining far outstripped agriculture and even exceeded manufactures and rail transport. While population increased 62 percent, agricultural production 48 percent, the physical volume of manufactures 210 percent and the freight handled by steam railroads 238 percent, the production of minerals increased 286 percent. Aside from food products and printing more than half the value added in manufacturing comes from industries fabricating the mineral materials, and minerals furnish approximately 65 percent of the freight transported by rail. The minerals supply the chief bases of the chemical industry. They have displaced wood as the chief material of construction. They are the foundation of transport, which is the greatest of all consumers of metal and power. The minerals are the essence of industrialism and, one may add, of war, for modern war might almost be described as a chemical reaction built up around the metals, the nitrates and the coal tar derivatives. Ours is the age of the power machine, and minerals furnish both the power and the machine.

The result is an astonishing increase in the

draft on the underground reserves. In the hundred years from Waterloo to the Marne the white population of the world increased threefold, but the consumption of the metals and the mineral fuels increased seventy-five to one hundredfold, the world's requirements expanding like a sum at compound interest drawing 5 to 7 percent a year. The World War checked the rate of increase especially in coal and iron, but 1929 saw new peaks of world production in all of the principal minerals except gold, which in every country tends to be the first depleted. It is reasonable, however, to expect a gradually diminishing rate of increase, for it is incredible that the geometrical increase of the nineteenth century should persist indefinitely. The cumulative effect of increasing demand is seen in the fact that in the last generation the world has used more metal and more coal and oil than in all previous time. Machine civilization faces a dilemma—how to reconcile this insatiable growth of demand with the obvious limitations of supply.

The characteristics inherent in the geography and geology of mineral resources cut across all problems of mineral economics. First among these is the localized occurrence of mineral deposits and production (Table II). Nearly all the world's radium comes from a single mine in the Belgian Congo, the nickel from Canada and New Caledonia and 80 percent of the tungsten from southeastern Asia. Even for the commoner metals, which are widely disseminated in the earth's crust, the mining has been concentrated in marked degree; six regions produce three fourths of the world's iron ore requirements, despite the fact that iron resources are available in almost every country.

Second among the characteristics peculiar to mining is the fortuitous character of discovery. All business runs a risk of upset through technical change or through a change in habits of consumption, but in mining there is also the chance of discovery of new deposits and the chance that a given ore body may grow larger or smaller, richer or leaner, with depth. Until 1890 Sicily supplied the world with sulphur and the future seemed reasonably secure; then this future was shattered by a new process whereby sulphur was recovered from alkali waste and by the development of deposits in the Gulf coast region of the United States, which resulted in American sulphur invading Europe in competition with Sicilian sulphur. An agreement partitioning the world market permits the Sicilian

TABLE II
PERCENTAGE DISTRIBUTION BY COUNTRIES OF THE WORLD'S

COUNTRY	COAL	LIGNITE	PETROLEUM	IRON ORE	MANGANESE	NICKEL (IN TERMS OF METAL)	COPPER (MINE PRODUCTION)
North America							
Canada	0.9	1.6	0.1	—	•	88.8	5.8
Mexico	0.1	—	3.0	0.1	•	—	4.5
United States	41.5	†	67.8	37.1	1.8	0.6	46.7
Other countries	•	—	•	1.1	0.1	—	0.2
South America							
Argentina	†	†	0.6	—	•	—	—
Bolivia	—	—	—	—	—	—	0.4
Brazil	•	—	—	•	9.2	—	—
Chile	0.1	—	—	0.9	0.1	—	16.5
Colombia	•	—	1.4	—	—	—	—
Peru	—	—	0.9	—	—	—	2.9
Venezuela	•	—	9.3	—	—	—	—
Other countries	—	—	0.7	—	—	—	—
Europe							
Austria	•	1.5	—	1.0	—	—	0.1
Belgium	2.0	—	—	0.1	—	—	—
Czechoslovakia	1.2	10.0	•	0.9	—	—	0.1
France	4.0	0.5	•	25.4	—	—	•
Germany	12.3	77.0	0.1	3.1	•	—	1.5
Saar	1.0	—	—	—	—	—	—
Hungary	0.1	3.1	—	0.1	0.6	—	—
Italy	•	0.3	•	0.4	0.3	—	•
Luxemburg	—	—	—	3.8	—	—	—
Netherlands	0.9	0.1	—	•	—	—	—
Poland	3.5	•	0.3	0.3	—	—	—
Rumania	•	1.2	2.3	0.1	1.0	—	•
Russia	2.7	†	6.7	3.6	34.4	—	1.3
Spain	0.5	0.2	—	3.3	0.5	—	3.3
Sweden	•	—	—	5.8	0.4	—	•
United Kingdom	19.7	•	—	6.7	—	—	•
Yugoslavia	•	2.3	—	0.2	0.1	—	0.8
Other countries	•	0.8	•	0.6	0.1	1.2	1.5
Asia							
China	1.9	—	—	0.9	1.2	—	0.2
Korea (Chosen)	0.1	—	—	0.3	—	—	•
Federated Malay States	0.1	—	—	—	—	—	—
India	1.8	—	0.6	1.2	29.5	1.5	0.4
Japan	2.6	0.1	0.1	†	0.5	—	4.2
Dutch East Indies	0.1	—	2.7	—	0.6	—	—
Persia	—	—	2.8	—	—	—	—
Russia	0.5	†	0.1	••	—	—	••
Turkey	0.1	•	—	—	•	—	—
Other countries	0.3	•	0.4	0.4	0.1	—	0.3
Africa							
Algeria	•	—	•	1.1	•	—	•
Belgian Congo	•	•	—	•	—	—	7.1
Gold Coast	—	—	—	—	13.5	—	—
Rhodesia	0.1	—	—	•	0.1	—	0.3
Union of South Africa	1.0	—	—	•	0.3	—	0.5
Other countries	•	—	0.1	1.1	5.6	—	0.7
Oceania							
Australia	0.8	0.8	—	0.4	•	0.1	0.7
New Caledonia	•	—	—	•	—	7.8	—
New Zealand	0.1	0.5	—	—	—	—	—
Other countries	—	—	—	—	—	—	—

* Less than one tenth of 1 percent.

† Included with coal.

‡ Not available.

•• Included with Russia in Europe.

TABLE II

PRODUCTION OF PRINCIPAL MINERALS, 1929

LEAD ORE (IN TERMS OF METAL)	ZINC (MINE PRODUCTION)	TIN (CONTENT OF ORE)	GOLD	SILVER	BAUXITE (ALUMINUM ORE)	SULPHUR	COUNTRY
							North America
8.5	5.2	—	9.9	8.9	—	—	Canada
14.2	10.0	—	3.4	41.7	—	—	Mexico
33.6	38.0	—	10.5	23.5	17.3	85.2	United States
0.6	2.0	*	0.3	1.2	—	—	Other countries
							South America
0.2	—	—	*	*	—	—	Argentina
0.9	0.1	24.1	*	1.9	—	—	Bolivia
—	—	—	0.5	*	—	—	Brazil
0.1	*	—	0.1	0.1	—	0.6	Chile
—	—	—	0.2	*	—	—	Colombia
1.6	1.4	—	0.6	8.3	—	—	Peru
—	—	—	0.2	*	—	—	Venezuela
—	—	*	0.6	0.1	18.5	—	Other countries
							Europe
0.4	0.2	—	—	*	—	—	Austria
—	0.3	—	—	—	—	—	Belgium
0.3	*	—	*	0.3	—	—	Czechoslovakia
0.6	0.6	—	0.3	0.1	31.0	—	France
3.5	8.2	—	*	2.1	0.3	—	Germany
—	—	—	—	—	—	—	Saar
*	—	—	—	—	18.1	—	Hungary
1.8	5.0	—	*	0.2	9.0	11.5	Italy
—	—	—	—	—	—	—	Luxemburg
—	—	—	—	—	—	—	Netherlands
0.7	8.1	—	—	0.1	—	—	Poland
*	—	—	0.4	*	0.1	—	Rumania
0.5	0.3	—	5.1	0.1	—	—	Russia
8.2	2.9	—	*	1.0	0.1	0.4	Spain
0.4	1.7	—	0.1	*	—	—	Sweden
1.1	*	1.7	*	*	0.1	—	United Kingdom
0.8	*	—	0.1	*	4.8	—	Yugoslavia
0.5	0.4	0.4	*	0.2	0.3	—	Other countries
							Asia
0.4	0.3	3.5	0.3	*	—	—	China
*	—	—	0.7	*	—	—	(Chosen) Korea
—	—	34.9	0.1	—	—	—	Federated Malay States
5.9	1.8	1.4	1.9	*	11.4	—	India
0.2	0.6	0.4	1.8	2.2	—	2.3	Japan
—	—	18.3	0.6	0.8	—	—	Dutch East Indies
—	—	—	—	—	—	—	Persia
—	**	—	—	—	—	—	Russia
0.4	0.2	—	*	0.1	—	—	Turkey
*	1.1	7.2	0.9	2.8	—	—	Other countries
							Africa
0.5	0.9	—	—	0.1	—	—	Algeria
—	—	0.4	—	*	—	—	Belgian Congo
—	—	5.6	—	—	—	—	Gold Coast
0.1	1.3	—	—	*	—	—	Rhodesia
*	—	0.6	—	0.4	—	—	Union of South Africa
2.7	0.3	0.3	—	—	—	—	Other countries
							Oceania
11.3	9.1	1.2	—	*	—	—	Australia
*	*	—	—	—	—	—	New Caledonia
—	—	—	—	—	—	—	New Zealand
—	—	—	—	—	—	—	Other countries

Source: For lead: Great Britain, Imperial Institute, *The Mineral Industry of the British Empire and Foreign Countries, Statistical Summary, 1929-31* (1932). For other minerals: United States, Bureau of Mines, *Mineral Resources of the United States, 1929*, 2 vols. (1932).

industry to survive, but its production in 1929 was hardly 60 percent of that in 1900. The history of mining abounds with parallel examples. The discovery of radium in the Katanga cut the world price in half, while the discovery of platinum in South Africa and the deep levels of the Froot mine of Ontario completely altered the prospects of the Russian and Colombian producers, who formerly had a virtual monopoly. It is this element of chance that introduces in many branches of mining a high degree of risk and speculative gain.

But the greatest of the characteristics peculiar to mining is exhaustibility and the consequent tendency to increasing cost. Mineral reserves usually show a small proportion of rich and easily accessible material grading into much larger proportions of lean or inaccessible material, and it is a commonplace that the richer deposits are attacked first. As these are exhausted mining proceeds to leaner ores and thinner beds at greater depths, so that the natural conditions become progressively more difficult. For a while this tendency may be offset by more efficient management, but there comes a time when with the best of management the old mine cannot compete. Increasing cost is the Nemesis of mining enterprise. The ominous record of steadily growing difficulties reflected in increasing costs can be seen in thousands of individual mines and scores of districts around the world. The universal tendency of natural conditions to grow more difficult is frequently offset, however, by countertendencies in an opposite direction. Mineral economics is the record of a battle between the growing difficulties of nature on the one hand and the factors of exploration, transport and technology on the other.

Discovery of new deposits, the first of the factors offsetting depletion, tends to be most active during the early settlement of a country. Most of the great metal districts of Spanish America had been found within a hundred years after the voyage of Columbus. A second and greater wave of exploration followed the discovery of gold in 1849 in California. The wave rolled over the western United States, Australia, British Columbia, the Straits Settlements and Alaska. In the settled lands of Asia old workings were quickly rediscovered, and the riches of South Africa were unearthed soon after the Boer migrations. Over most of this area the wave of surface prospecting has now largely spent itself, and the only regions in

which anything like the California gold rush is now going on are Rhodesia and the Congo and northern Canada. In the United States no great finds comparable with Butte or the Comstock lode have been uncovered in the last quarter century; and of the thirty-three leading districts producing gold, silver, copper, lead, zinc and even iron only five have been found since 1900 and none at all since 1907. Discovery, however, continues to make large contributions to the supply of those minerals which the old time prospector could not see or whose value he did not recognize, such as oil and gas, bauxite, sulphur, borax, helium and the rare metals. But the search for minerals must now be organized on a large and costly scale. A new science of geophysical prospecting offers possibilities. It seems likely that the costs of exploration will increase and that future discoveries will consist more in the extension of known deposits than in the location of new ones.

Extension of the transport system acts to offset increasing costs by opening deposits already known but hitherto inaccessible. A classic example is the completion of the American transcontinental railroads. Many of the western mining districts, first worked for placer gold, were known to contain the baser metals; but not until rail transport was provided could large scale exploitation begin. Thereafter a tide of non-ferrous metals poured upon the markets of the world, increasing supply and lowering prices.

But as more and more of the earth's surface is prospected and as the rail and highway net is pushed nearer to completion, the relief to be expected from exploration and transport becomes less, and the burden of meeting the increasing difficulties of mining falls back more and more upon technology. The progress of mineral technology is now distinguished less by the single epoch making changes produced by the inventions of Savery, Watt and Bessemer than by the cumulative result of a great number of smaller changes. Efficiency, however, has advanced still faster than before. Underground the changes center around the mechanization first of haulage, then of drilling and undercutting and finally of loading the broken mineral into the mine car, the change from hand to machine methods being greatly facilitated by electrification. Similar advances in steam and electric shovels have enormously changed open pit mining. Parallel to and reinforcing mechanization have come advances in the art of handling ore, the peculiar province of the min-

ing engineer. Until recently an essential of the miner's task was to select the valuable ore from the waste. The transition from this older selective mining to mass methods, by which all the material in the mineralized area is removed to the surface and the ore separated from the waste by mechanical means, is a revolutionary change; in coal the impurities are washed out with streams of water or air, and in metals shaking tables and the ingenious process of flotation are used. The cumulative effect of technological advance is seen in the increasing output per worker in the mines, which has been rising wherever the pressure of increasing natural difficulties is not too serious. From 1889 to 1929 in the United States the output per worker increased 89 percent in mining bituminous coal. For copper mining the corresponding increase was 98 percent, for iron ore 543 percent, for gypsum 490 percent and for phosphate rock 995 percent. Similar though seldom equal increases have occurred in other countries where the physical conditions have permitted, as, for example, in the iron mines of northern Sweden, Luxemburg and Lorraine, which are in the stage of relative youth.

On the other hand, it is critically important to note that where depletion is serious it has often swallowed up all the advances of technology, so that the output per worker is stationary or declining. This is found even in North America, as in the anthracite and mercury mines of the United States and in the undersea coal mines of Nova Scotia. It is found more often in Europe, where exhaustion is naturally further advanced than in the New World. Thus the iron ore mines of Cumberland and Spain, which are older than those of Lorraine and northern Sweden, show a declining output per worker or at best no increase. Such was also the condition of the European coal mines for the forty years ending in 1924; since 1924 there has been some improvement, especially in the Ruhr, but the general position of the European coal industry is illustrated by Britain, where the yield per worker is notably less today than it was in the 1880's.

The test of output per worker thus reveals both declining and increasing costs of mining. But advances in the technique of production have been reenforced by similar advances in the arts of utilization, and economies in use have further helped to offset the steady depletion of the richer deposits. The lines of attack have included the development of substitutes, illus-

trated by the use of aluminum instead of tin and by the replacement of mineral nitrate from Chile with synthetic products derived from atmospheric nitrogen. Notable progress has been made in recovery of by-products, illustrated by the rise of the by-product coke oven and the recovery of gold and rare metals in the electrolytic refining of copper. Rust resisting alloys prolong the life of steel. Consumption of fuel per horse power hour has been cut to a tenth of what it was in the days of Watt, and the advance in thermal efficiency has been especially rapid in the last twenty years. From 1909 to 1929 the average consumption of fuel per unit of product was reduced 66 percent in electric central stations, 47 percent on the steam railroads and about 33 percent in all industries and railroads combined. The cracking process and other advances in petroleum refining have doubled and trebled the yield of gasoline from crude oil. Practical methods for synthesizing alcohols and gasoline developed by French and German chemists indicate that given sufficiently high prices the world's motor fuel and lubricants can be produced from coal.

In the case of the metals the drain upon resources is lightened by the accumulation of a working capital above ground which tends to come back in the form of scrap. As the stock increases the quantity of scrap tends to increase also, and the collection and resmelting of scrap have now become a large industry. In the United States alone the annual value of secondary non-ferrous metal amounts to \$330,000,000 and the value of scrap iron and steel may be equally great. Scrap is increasing faster than the mine production of new metal. The growing importance of the secondary material modifies the demand for the primary material and adds to the bargaining power of consumers, who are also the largest producers of scrap. The extent to which scrap will supply the needs of the future depends partly on the course of prices. If and when the growing difficulties of mining force new levels of price, the proportion recovered will increase. It is conceivable that the world will reach a point, obviously in the far future, where the demand for virgin metal will be limited chiefly to replacing the loss effected by dissipating uses, wastage and corrosion and where the bulk of the annual requirements will be met from scrap.

The net result of the battle against increasing costs is seen in the long time trend of mineral prices. Taking the world as a whole and the

minerals as a whole, prices have been falling in relation to the general commodity index throughout most of the last hundred years. There are important exceptions, such as the relative increase in the price of bituminous coal in England and of anthracite in the United States; but in the world view it is clear that up to the present the factors of discovery, transport and technology have been winning over the increasing difficulties of nature. In individual districts or countries, however, there are many evidences of depletion and advancing age. The characteristic migration in centers of production is as much a sign of increasing costs in the old districts as of abundant resources in the new. From western Europe the center of metal mining shifted to the United States, but the imposing totals of American production have been sustained by exhausting many once famous districts and turning quickly to new sources of supply.

In any country the metals, according to de Launay, are attacked in descending order of price. There is first a period of exploitation of gold and silver, followed successively by periods of copper, lead and zinc and iron. The successive periods overlap, for more than one metal is worked at a given time; but the relative order of emphasis tends to follow the value per pound. Western Europe has long since passed the gold and silver stage and probably the copper and lead stages as well. In England the stage of gold and silver was passed early; the peak of copper was passed in 1861, of lead in 1870, of zinc about the same time and of tin in 1871. Even the peak of high grade iron ore was passed in 1882. The United States has passed the peak of gold production, for even under the incentive furnished by the price levels of 1932 the output was only a little more than half the 1915 peak; and apparently it has passed the silver peak as well. The United States is in the copper stage of metal exploitation. In any country moreover the exploitation of a given mineral, according to Hewett, tends to follow a typical life cycle, characterized in youth by an exportable surplus of crude mineral and in old age by imports of crude mineral from abroad. The operation of this cycle is very clearly exemplified in the Old World, especially in Belgium, and it may be seen in process in the United States. On balance the United States still has a large exportable surplus of minerals, but three of its most important industries—oil, copper and Pennsylvania anthracite—show a decline in ratio

of exports to imports; in 1932 all three asked and obtained tariff protection, reflecting in part the plight of increasingly influential groups of marginal producers, whose mines are getting deeper and who can no longer meet foreign competition. While most of the American mineral industries are in the stage of youth or early maturity, the evidence is clear that they are following the course already taken by so many Old World districts, which leads ultimately to increasing costs.

The characteristics peculiar to mineral resources—localized occurrence, the chance nature of discovery and exhaustibility—have largely influenced the business organization of mining. Their effects, however, are by no means uniform because of the great variety of natural conditions in the mineral industries. The speculative reputation of some branches of mining, such as the precious metals, copper and oil, rests on uncertainties of discovery and reserves and on the sharp variations in price characteristic of most of the high value minerals. The shares of even the more stable companies listed on the New York and London exchanges fluctuate more sharply than the average of industrial stocks. Investors are impressed with occasional brilliant successes and overlook the large percentage of failures; at Cripple Creek the proportion of incorporated ventures actually paying back their capital is said to have been 1 in 3500. These conditions have made oil and the metals, especially gold, a fertile field for wildcat securities issued by fraudulent promoters.

The chance of large reward attracts great numbers of would be entrepreneurs, and on the frontiers of white settlement mining is often characterized by many small undertakings. In proportion to total output the number of producing units is probably greatest in the stage of placer gold mining. Even coal mining tends to begin with many small workings along the hillsides. And in the mining the petty enterprise displays a curious persistency. But the tendency toward concentration of control—present in all industry—is intensified in mining by the process of depletion. Exhaustion of the more accessible mineral soon curtails the number of producers and concentrates production in corporate units commanding sufficient capital to work the larger ore bodies in depth. The advantages inherent in large scale production have been reenforced by the technological change from selective to mass mining already described and by the competition from other

districts which cheaper transport has fostered. The process of concentration was interrupted by the World War, when sudden increase of prices led to the opening of thousands of new mines—metallic, non-metallic and coal. It has since been resumed with increased intensity; and mortality of the marginal mines, especially of the smaller commercial classes, has been so great that, for example, the number of bituminous coal mines in the United States declined from 9331 in 1923 to 6057 in 1929.

The tendency toward vertical integration, observable in many other industries, is intensified in mining by the localized occurrence and varying quality of mineral deposits. Smelting and refining of the metals are typically combined with mining, either directly or by commercial alliance, partly in order to assure outlets for the mine, partly to assure a mixture of ores with desired fluxing qualities for the smelter. There are, however, important exceptions, such as the zinc smelters of Belgium and the Mississippi valley, which are independent of mining. Petroleum refining is generally integrated with production of crude oil, transport by pipe line and tanker, and distribution. In iron and steel the integration extends not only from furnace to ore but to coal mines and limestone quarry or even to the smelter and mine producing the zinc for galvanizing. In some instances the integration crosses over into the manufacture of finished goods; sometimes the initiative comes from the manufacturer seeking raw materials, as in the case of the Ford Company and the International Harvester Company; sometimes from the mineral producer seeking outlets, as in the case of the American Aluminum Company and the Anaconda Copper Company. Where the raw mineral is available in abundance, however, the incentive to vertical integration is small. Thus except for railroad fuel hardly 7 percent of the bituminous steam coal production of the United States is controlled by consumers, although most steel companies have found it prudent to acquire reserves of high grade coking coal, the supply of which is relatively limited.

The peculiarities of mineral deposition largely influence the workings of competition in mining. Nowhere does the classical conception of competition as the automatic and beneficent regulator of supply in relation to need require more reservation on the score of lag, friction and waste than in the exploitation of mineral resources. No other field has given rise to

more interesting experiments in production control. Where the known deposits are few there is a tendency to monopoly. In radium, nickel, vanadium, molybdenum, borax, sulphur and aluminum the world supply is dominated either by a single company or at most by a few. But where the deposits of commercial grade are numerous there is often a tendency to overdevelopment and destructive competition. Excess productive capacity is found in many lines of industry, but the causes operative elsewhere are reenforced in mining by the desire of the owner of each deposit to profit from his holding through the only use to which it can be put, by the fact that a new mine typically has lower costs than an old one and particularly by the pressure to open additional mines in order to meet taxes and carrying charges on undeveloped reserves. The tendency is aggravated in the United States by the common law doctrine that ownership of the surface carries ownership of the subsurface as well until otherwise disposed of, a concept which caused title to most of the coal and other stratified mineral deposits to pass into the ownership of a million or more farmers in small rectangular holdings that bear no relation to the facts of geology or to the economics and engineering of mining. The discordance is most serious in the case of migratory oil and gas.

The World War by driving up prices further stimulated expansion of mining capacity, and the condition is intensified by mechanization and by changes in consumption. The growth of coal demand is retarded by thermal efficiency and that of metal demand by the rise of scrap. As a result excess productive facilities became especially apparent in the post-war years. The condition affects the Old World as well as the New and the metals as well as the fuels. The readjustments necessary were most serious in coal mining, and they have shaken the industry of three continents.

Overdevelopment has led to many attempts at production control. Outside of the oil industry and of export associations organized under the Webb Act, the movement in the United States is still largely in the stage of discussion. The recent decision of the Supreme Court in the Appalachian Coals case, permitting the formation of selling pools by groups of coal operators, may materially alter the present situation. In Europe the favored device is the cartel, and the urgency of the problem of production control in the minerals is shown by the fact that

of forty-six international cartels sixteen deal with mineral products and seven others with forms of rolled steel. The British coal industry is operating on a system of quotas under government supervision, established in 1930. Proposals for an international coal cartel have so far met unsurmountable obstacles. The situation in Europe has increasingly called forth intervention and regulation by the government and has strengthened the demands for nationalization of some of the mineral industries, e.g. British coal, on economic, social and national grounds.

H. O. ROGERS
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LABOR. The wide geographical distribution of mineral resources, their isolated location and limited life have brought distinctive social problems into the mining areas. The boom town of the gold rush, with its crowds of single men and its colorful disorder, has a soberer counterpart in the mushroom growth that now follows discovery of a new oil pool. But equally characteristic are the ghost towns that haunt abandoned mines in all parts of the world, bearing mute testimony to the exhaustibility of mines and the unstable character of mining. Where the mines are large, other industries may be attracted to the region, as silk and rayon have been drawn to the American anthracite area to utilize the labor of the women. Even a large city like Scranton, however, faces painful readjustment when the Lackawanna steel industry moves west in search of cheaper ore and fuel and when the virgin coal of the area nears exhaustion and mining must turn to pillars and thin seams.

Of the more than 800,000 miners employed in American mines and quarries (exclusive of petroleum and natural gas wells) an increasing proportion, especially in the coal fields of the north, live in incorporated communities where a goodly percentage own their homes. But there are also many hundreds of squalid mining "patches" where the prospect of exhaustion of the mineral resources destroys the incentive to improvement. The problem of isolation is most acute in the company towns, where the mine operator owns the land, houses and company store, builds the roads, school and church and supplies fuel, light, water and doctor. This paternalistic relation between employer-landlord and worker-tenant in the company town creates problems inimical to free social institutions,

tempts the owner to exploit the worker through the company store, gives him great power over the social life and civil rights of his employees and has frequently been utilized by the employer to resist organization by trade unions and to crush strikes.

In the ancient civilizations mines were worked mainly by slaves, including convicts and prisoners of war, who could be forced to endure the arduous labor and the dangers of underground mining. The slave miners were cruelly and sordidly exploited in the Egyptian and Athenian mines, the Phoenician and the Roman. The miners crept naked underground and worked amid great hardships, urged on by the blows of overseers; children sometimes crawled after them with baskets, collecting the ore and carrying it to the surface; there old men and women, old and their vigor destroyed by the time they were thirty, pounded the ore in mortars and crushed it in hand mills. Frequently roofs caved in and buried the miners. Weakness and sickness were met with blows, conspiracies and escapes with death. In the Roman Empire the sentence in *metalla*, condemned to the mines, was the most severe penalty next to death. There were many revolts of the slave miners in Egypt; in Athens, where rebellious miners once entrenched themselves on a mountain and raided the surrounding territory; and in Spain, where one revolt involved 40,000 miners. A class of free miners sometimes existed alongside slave labor, as is shown by the regulations for mines in Portugal in the reign of Hadrian, where the mines were worked largely by individuals, some of whom did their own work while others employed slaves. One of the consequences of the downfall of the Roman Empire was the freeing of these slave miners.

During the late Middle Ages arose the free prospecting and working miner and the free mining community, recognized by law in the fourteenth and fifteenth centuries. The mining community, which included the lords of the soil, the persons working or exploiting the mines and the royal tax collectors, had its own organization, courts of law and recognized rights, which were frequently amplified and strengthened by the royal power in its struggle with the nobility. As mining became more and more a large scale capitalist enterprise the wage laborer, the ancestor of the modern proletarian, made his definite appearance. The miner was a free hired worker, propertyless and wholly dependent upon his wages, subject to unemployment. He

was also nomadic; thus the *freie Knappen* of Germany migrated in large numbers to other countries, bringing their skill with them and considerably influencing the development of mining. But while the miners enjoyed many privileges, including exemption from villenage, their labor was hard and wages were low compared with other skilled trades. The miners early formed organizations, such as the *Knappschaften*, for mutual aid and struggle against the employers. Meanwhile in the mines of the New World older conditions of slave labor were introduced; it has been estimated that in Mexico and Peru 80 percent of the Indian laborers died every year and in the West Indies the mortality was so great as to force the importation of Negro slaves. Vestiges of the colonial exploitation of mine labor still exist. By the beginning of the industrial revolution European mines were being operated completely on a capitalist basis; and in the coalpits especially wages were at starvation levels, women and children were employed in heavy labor and working conditions were incredibly bad.

In few trades has the union movement made greater headway than among coal miners, who are a numerous class with a strong sense of solidarity. Grievances over the application of a complicated system of piece rates are common. Labor conditions among miners have often been below the average for wage earners as a whole. The demand for coal is inelastic, and although prices reflect world tendencies they are determined chiefly by local competition. Labor involves about 70 percent of the cost of production, a proportion far higher than in most industries. In these circumstances the employer is under strong pressure to cut wages in order to meet competitive conditions. One wage cut forces another, and a species of sweatshop competition ensues unless there is agreement as to a standard rate of wages. These characteristics go far to explain the development of trade unions in the coal mines of every country from Poland to Australia.

Powerful unions of coal miners have developed on the continent of Europe, particularly in Germany, France and Belgium, which bargain collectively with district and national associations of employers. Many great strikes have been waged, and the miners of the Ruhr in Germany were extremely active in the Communist revolutionary uprisings of 1919-21. In England the union movement in the coal fields dates from 1830. The Miners' Association of Great Britain

and Ireland was formed in 1841 but was crushed by Lord Londonderry three years later, when it came to the support of the Durham miners in their historic struggle for fairer terms of hiring. In 1858 the union movement was revived by Alexander MacDonald and in 1888 the scattered unions were united in the Miners' Federation of Great Britain, which is now entrenched in all British coal mining districts. The federation waged many great strikes, materially improved the workers' conditions and influenced social legislation. In 1913-15 after one of their strikes the miners made an agreement for mutual strike action with the unions of railway and transport workers, the "Triple Alliance"; but in the strike of 1921 the miners were abandoned by their allies. The 1,100,000 miners went into action again in 1926, when they were supported by a general strike of all unions. The general strike lasted ten days, but it had been forced upon the leaders and they called it off at the first opportunity. The miners, however, maintained their hopeless struggle over a period of from three to nine months.

Unionism took early hold in the American coal mines; the first local union was organized in 1849 and the first national association of coal miners in 1861. The subsequent history of trade unionism in the coal mines is the record of a struggle to establish collective bargaining on a scale broad enough to stabilize wage rates in an industry of continental proportions operating in twenty-three states and four Canadian provinces. Local and even district unions proved unable to cope with interdistrict competition. The National Federation of Miners and Mine Laborers negotiated the first interstate wage agreement in 1886; but the system soon collapsed, partly through difficulties of enforcing the agreement and partly because of rivalry with the Knights of Labor, which for a time was active in the coal fields. Out of the wreckage of these two organizations was salvaged the United Mine Workers of America, which within a few decades was to become the largest trade union in the United States. The union in 1898 forced the establishment of collective bargaining in bituminous mining in what is known as the central field—Illinois, Indiana, Ohio and western Pennsylvania—with subsidiary agreements governing the outlying union fields. In the anthracite mines the union won its greatest victory under the leadership of John Mitchell in the strike of 1902, which forced recognition and set up machinery of conciliation and col-

lective bargaining. Through a series of strikes and suspensions and fortified by the practise of the "check off" of union dues the union so strengthened its position that at the height of its power in 1922 it was able to close 70 percent of the coal production of the United States and Canada. The strike affected some 450,000 men in the bituminous mines and 158,000 in the anthracite mines, lasted nearly five months and in point of numbers engaged, if not in duration, was the greatest industrial dispute in American history. Since then, however, the union has declined steadily under pressure of employer resistance and internal dissension (*see* COAL INDUSTRY). In 1932 a portion of the Illinois membership broke away from the parent body and formed the Progressive Miners of America under left wing leadership. In the 1931 strike in the Kentucky coal fields leadership was furnished by the Communist National Miners Union. Wages and labor standards have declined severely.

The International Miners' Federation, organized in 1890, deals only with coal mining and brings into consultation representatives of the national unions of Great Britain, France, Belgium, Germany, Poland and Czechoslovakia. Delegates from the United States have also participated from time to time. The possibility of mutual support in the event of strike was put to the test in 1926 by the great struggle of the British miners against longer hours and decreased pay. Plans for an embargo on exports to England and for an international strike collapsed, although some assistance in relief funds was provided. Since 1891 the federation has endorsed nationalization of coal mines, urged by the socialist movement for a generation. It was made a major issue by the British and German miners after the World War, and although defeated by the opposition of the owners the agitation left its mark in the increased social control which was incorporated in subsequent legislation.

Metal mining, in contrast to coal mining, shows relatively little of trade union organization. This is partly due to the tradition of the Cornish miners, who have been to metal mining in all English speaking countries what the Welsh, Scottish and English have been to coal mining. The Cornish miners worked for generations on the tribute, or contract, system, and there is little record of trade union movement in the Cornwall mines even down through the nineteenth century. Migrating to the metal mines

of the United States, Canada, the Straits, Australia and Africa, the Cornishman took with him his preference for contracting, although usually he would join a union if and when other workers in the mines had taken the initiative in forming one.

In the American west every miner had his prospect and dreamed of becoming rich; wages on the frontier were relatively high and in the gold camps "high grading" was possible. Metal prices were fixed by world competition and not by local conditions, and there was not the continuous pressure to reduce wages as in the coal mines. While a local union was organized at Virginia city as early as 1867 and assemblies of the Knights of Labor were scattered through the metal mining districts, no move for collective bargaining on a district scale was made until the organization of the Western Federation of Miners in Butte in 1893. By that time conditions had changed. Much of the glamour of the early days had gone and the metal miner had changed from free adventurer to wage earner. Moreover operations were being concentrated in the hands of corporate enterprises that often controlled the state governments. During the strikes waged by the federation the employers utilized the state militia, the injunction and deportation as instruments of repression. Violence verging on civil war marked the series of great strikes waged by the federation—Coeur d'Alene in 1893, Cripple Creek in 1894, Leadville in 1896-97, Lake City and Coeur d'Alene in 1899, Telluride in 1901 and Idaho Springs in 1903. Through these strikes the federation secured many improvements in labor conditions. The struggles of the metal miners culminated in the bitterly fought strikes at Cripple Creek in 1903-04 and Goldfield in 1906-07. Out of these struggles arose the famous Moyer-Haywood-Pettibone case, which involved the illegal kidnaping of these union leaders, their arrest and trial on the charge of having murdered Governor Steunenburg of Idaho, and their ultimate acquittal. In 1905 the federation sponsored the organization of the Industrial Workers of the World but two years later withdrew its support. Thereafter unionism among the metal miners rapidly declined. Opposition of employers increased; and the "rustling card," or work permit, originated at Cripple Creek, spread to Butte and elsewhere. The correction of many of the workers' wrongs by state law or by action of the mining companies and the adoption of a sliding scale of wages based on the price of

metal, an arrangement which brought increases of wages with the rapid advance in metal prices after the World War, have removed some of the major arguments for unionism. The International Union of Mine, Mill and Smelter Workers, successor to the Western Federation, remains a nominal affiliate of the American Federation of Labor. The membership of the Union is small, however, and its power to negotiate wage agreements is limited.

Few other attempts have been made to organize the metal miners. One significant exception was the unsuccessful move made by the I. W. W. to organize the iron miners on the Mesabi Range, Minnesota, in 1916. Nor have the petroleum and natural gas industries been responsive to the trade union movement. A union of oil and gas workers organized with government support during the World War collapsed soon after the close of the war, and the 300,000 workers in this industry are for the most part unorganized.

Throughout the history of miners runs a thread of militancy, from the slave revolts of antiquity and the *freie Knappen* in mediaeval Germany to the Molly Maguires, the Western Federation of Miners and United Mine Workers in the United States and the revolutionary temper of the Ruhr miners. Even the Cornish miners earned the reputation in an earlier day of being "the roughest and most mutinous men in England." The militancy is mainly due to the influence of the miners' arduous occupation on the character of the men and to the dominant position of the employer in the typical mining community.

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See: MINING ACCIDENTS; MINING LAW; METALS; QUARRYING; COAL INDUSTRY; OIL; GAS INDUSTRY; NATURAL RESOURCES; CONSERVATION; INDUSTRIAL REVOLUTION; TECHNOLOGY; LOCATION OF INDUSTRY; TRADE UNIONS; COMPANY TOWNS; POLICING, INDUSTRIAL.

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MINING ACCIDENTS. Mining has always been a particularly hazardous industry. Although the death rate of miners from all types of disease is only slightly higher than that of workers in general, the death rate of miners from accidents is nearly four times as high. The mining industry does not provide facts to support the theory that wages in dangerous trades are adjusted to the degree of risk involved. The wages paid to mine workers, especially coal miners, are not sufficiently high to provide adequate incomes for their families or adequate insurance against the irregular and hazardous nature of mining work.

Studies of the sickness records of 357,321 German miners reveal that diseases of the digestive organs constituted 11.1 percent of all cases, neuralgia 9.4 percent, muscular rheumatism 8.3 percent, diseases of the respiratory organs 8.1 percent and other diseases each less than 1 percent. No extensive studies of morbidity rates among American miners have been made, so no direct comparisons are possible. Among American coal miners, according to Dr. Emery R. Hayhurst, "tuberculosis and pneumonia have about the same prevalence as elsewhere. . . . Several diseases supposedly of industrial character among miners, such as hook-

worm, nystagmus, and lockjaw, are practically non-existent." Digestive diseases are especially common among miners because they usually eat cold luncheons with unwashed hands in quite unsanitary surroundings. Neuralgia is induced or aggravated by dampness and is probably also affected by harmful gases in the air. Rheumatism results from working in cramped positions in wet clothing and in an atmosphere impregnated with moisture. The sudden change in temperature upon emergence from the mine shaft increases the prevalence of muscular rheumatism and respiratory diseases of all kinds. Diseases of the respiratory organs constitute a special hazard to miners because of dust, noxious gases and damp, impure air. Pneumokoniosis, also known as silicosis, anthracosis, miners' phthisis and miners' asthma, is a disease peculiar to miners who breathe air filled with inorganic dusts, which causes the lung tissues to lose their spongy resiliency and predisposes to tuberculosis; the disease is preventable by the elimination of dust. Respiratory diseases, including pneumonia, asthma and tuberculosis, cause far more deaths and permanent disabilities than does any other form of illness. Among Illinois coal miners tuberculosis causes 9.2 percent of all deaths, pneumonia 9.1 percent, while other respiratory diseases account for 3.9 percent. Diseases of the respiratory organs rank next to accidents in deadliness.

Accidents in mining are more frequent than in other industries because the worker is exposed not only to the hazards of machinery but

TABLE I

ACCIDENT RATES IN TEN MOST HAZARDOUS INDUSTRIES, UNITED STATES, 1929-31

INDUSTRY	NUMBER OF UNITS	1931			1930			1929		
		MAN HOURS (in thousands)	ACCIDENT RATES		MAN HOURS (in thousands)	ACCIDENT RATES		MAN HOURS (in thousands)	ACCIDENT RATES	
			FRE-QUENCY	SEVER-ITY		FRE-QUENCY	SEVER-ITY		FRE-QUENCY	SEVER-ITY
Mining*	90	34,263	61.32	8.90	47,756	65.46	9.68	52,750	66.62	9.01
Quarrying	92	9,256	16.64	6.06	13,656	18.16	2.13	14,096	23.98	5.88
Ceramic	31	7,473	22.75	4.68	12,479	22.20	1.68	15,583	26.63	1.10
Construction	203	37,560	56.71	4.52	64,777	52.47	5.81	85,547	55.16	5.68
Marine	7	22,900	15.33	4.33	28,203	16.20	2.46	26,534	16.09	2.11
Woodworking and lumbering	129	46,091	31.09	2.27	68,317	37.82	3.68	90,516	44.63	3.73
Steel	100	270,704	10.11	2.19	412,480	11.48	2.52	535,370	16.46	2.77
Public utility	233	421,622	11.30	2.09	463,025	16.55	2.81	460,030	21.72	3.25
Chemical	145	141,307	10.65	2.01	162,631	14.73	1.95	182,520	16.76	1.63
Petroleum	42	434,460	13.03	1.98	512,806	17.33	2.27	500,690	25.85	2.40

* Includes coal, metal and non-metal mines.

Source: Compiled from National Safety Council, *Accident Facts 1932* (Chicago 1932) p. 20.

TABLE II
LOST TIME INJURIES IN MINING, UNITED STATES, 1930

TYPE OF MINING	NUMBER OF ESTABLISHMENTS	AVERAGE NUMBER OF EMPLOYEES	MAN HOURS WORKED (in thousands)	NUMBER OF LOST TIME INJURIES				NUMBER OF DAYS LOST TIME				INJURY RATES	
				TOTAL	DEATH AND PERMANENT TOTAL DISABILITY	PERMANENT PARTIAL DISABILITY	TEMPORARY DISABILITY	TOTAL	DEATH AND PERMANENT TOTAL DISABILITY	PERMANENT PARTIAL DISABILITY	TEMPORARY DISABILITY	FREQUENCY	SEVERITY
All groups	146	26,793	58,944	2,908	69	55	2,784	526,926	414,000	39,625	73,301	49.34	8.94
Metal	46	6,832	15,031	247	12	15	220	89,177	72,000	9,360	7,817	16.43	5.93
Non-metal	22	1,410	3,102	101	2	2	97	15,682	12,000	525	3,157	32.56	5.06
Anthracite coal	22	8,365	18,401	1,114	18	9	1,087	139,688	108,000	10,350	21,338	60.54	7.59
Bituminous coal	56	10,186	22,410	1,446	37	29	1,380	282,379	222,000	19,390	40,989	64.53	12.60

Source: National Safety Council, *Industrial Accident Statistics, 1931* (Chicago 1931) p. 22.

also to the hazards of cave-ins, explosions and fires. As standardization of accident statistics has only recently begun, it is not possible to present entirely satisfactory statistics of comparison for accident frequency rates and severity rates in mining and other industries (*see ACCIDENTS, INDUSTRIAL*). The National Safety Council, however, has published since 1930 carefully analyzed accident reports from a large number of plants in twenty-eight different industries. All of these reports show that mining (including coal, metal and other mines) is by far the most hazardous of all industries, in both frequency and severity of injuries (Table I). In 1931 mining involved 8 percent more accidents per 1,000,000 man hours than the construction industry, while the severity rate was nearly 47 percent higher than in quarrying; and the hazardous nature of mine work is still more apparent from the figures for 1929-30. While the rates change from year to year, not much significance, however, can be attached to the changes over short periods of time. A single disaster causing the death of 100 coal miners would greatly increase the lost time and raise the severity rate for that year. Statistics for 1931 alone, but covering a larger number of industries and reporting establishments, also give mining first place in the death and maiming of workers; mining led on all counts except in the severity rate for permanent partial disabilities, in which quarrying ranked first.

The accident hazard varies greatly in different kinds of mines and from plant to plant. Table II, compiled from statistics published by the National Safety Council, indicates that bituminous mining was the most hazardous in 1930, with a severity rate 66 percent higher than that for anthracite mining, 112 percent higher than that for metal mining and 149 percent higher than that for non-metal mining. The frequency rate

for bituminous mining was only about 6.6 percent higher than that for anthracite but it was about double the rate for non-metal and nearly four times the rate for metal mining. From 1930 to 1931, according to the National Safety Council statistics, the severity rate in anthracite mining increased 32 percent and the frequency rate nearly 40 percent, while in bituminous mining the severity rate decreased more than 23 percent and the frequency rate almost 13 percent. The changes, however, are exaggerated because the National Safety Council receives reports from only one fourteenth of anthracite operations and less than one seventieth of bituminous operations. Reports to the United States Bureau of Mines show that in 1931 the fatality rate per 1,000,000 man hours in all anthracite mines increased from 1.758 to 1.838, or 6 percent, while in all bituminous mines the fatality rate decreased from 2.158 to 1.812, or 16 percent. Anthracite mining led in fatality rates in 1931 for the first time since 1919 because of a major disaster that killed five anthracite miners, while no major disasters occurred in the Pennsylvania bituminous mines, which normally account for more than half of the fatal accidents in American bituminous mining. As may be seen from Table III, from 1916 to 1931 bituminous mining had the highest fatality rates in nine of the fifteen years; gold mining led in three years, anthracite in two years and copper in one year.

Since 1916 spectacular coal mine disasters resulting from gas and dust explosions account for only 9 to about 17 percent of all coal mine fatalities, while cave-ins of roofs and coal caused 45 to 54 percent of all coal mine deaths (Table IV). Explosives were much more disastrous in both metal mining and quarrying than in coal mining. Falls of roof and ore cause more fatali-

TABLE III
ACCIDENTS IN MINES AND QUARRIES, UNITED STATES, 1916-30

TYPE OF MINE OR QUARRY	NUMBER KILLED PER THOUSAND 300-DAY WORKERS						NUMBER INJURED PER THOUSAND 300-DAY WORKERS					
	1916	1917	1925	1928	1929	1930	1916	1917	1925	1928	1929	1930
All coal mines	3.93	4.25	4.65	4.64	4.54	5.00						251.40*
Bituminous	3.88	4.33	4.79	4.90	4.63	5.26						
Anthracite	4.11	3.98	4.12	3.85	4.24	4.22						
All metal mines	3.62	4.44	2.99	2.50	3.03	2.92	250.64	240.97	283.53	205.61	200.11	167.86
Copper	3.64	5.88	1.94	3.03	3.03	2.76	319.58	313.35	350.62	220.99	223.83	193.48
Gold, silver and miscellaneous	4.05	4.03	3.83	2.60	3.66	4.49	190.79	172.51	307.42	268.72	269.36	239.69
Iron	3.41	3.54	2.54	2.16	2.98	2.68	240.17	227.54	159.43	98.13	89.58	81.42
Lead and zinc	3.14	4.09	3.32	1.62	2.08	1.63	263.09	272.99	468.07	295.65	238.29	176.55
Non-metallic mineral	3.00	2.48	1.71	2.13	2.29	0.75	144.70	123.58	165.40	168.60	168.05	138.25
All quarries, including outside works	2.26	1.83	1.78	1.46	1.65	1.53	175.62	185.14	169.67	129.95	128.14	108.23
Cement rock	2.38	2.99	1.78	1.05	1.20	0.86	248.83	277.73	103.55	48.76	43.48	34.10
Granite	1.86	1.54	0.96	1.17	2.49	1.44	143.99	189.73	202.52	181.48	163.85	143.06
Limestone	2.36	1.79	1.76	1.84	1.87	1.77	176.10	175.52	193.47	166.02	171.46	142.78
Marble	1.16	0.57	0.56	1.08	0.79	1.07	125.20	100.20	116.04	110.38	95.62	91.41
Sandstone and blue-stone	1.28	0.99	3.32	1.02	0.39	2.79	127.86	118.89	200.31	160.50	134.99	121.51
Slate	2.62	1.31	2.60	1.24	0.67	0.47	85.00	112.04	168.98	158.87	164.55	152.14
Trap rock	4.45	2.61	4.13	3.13	4.07	5.30	237.84	222.92	324.87	205.78	218.93	188.34
All quarries, excluding outside works	2.32	2.00	2.28	1.99	2.18	2.47	158.63	162.95	195.02	162.46	172.48	155.06
All quarries, outside works only	2.15	1.53	1.22	0.99	1.18	0.80	206.06	223.81	141.06	100.34	89.21	71.76

* Statistics of non-fatal coal mining accidents were not computed until 1930.

Source: Compiled from United States, Bureau of Mines, "Coal-mine Accidents in the United States: 1930," *Bulletin*, no. 355 (1932) and "Metal-mine Accidents in the United States: 1930," *Bulletin*, no. 362 (1932).

ties than any other kind of accident in metal mines, accounting for nearly one third of all deaths. In quarrying, hauling and handling the quarried rock divided honors with falls of rock as the most important cause of fatalities. Machinery involves a much higher hazard in quarrying than in mining. For mining as a whole falls of roof and ore kill 2 to 6 times as many workers as explosions. Dust and gas explosions can be eliminated with moderate expense, but the idea must not be entertained that accidents will be brought down to the irreducible minimum when rock dusting, humidification and proper ventilation of coal mines have been effected to minimize explosions. So many factors contribute to the falling of roofs and ore that it is much more difficult and expensive to lower the accident severity rate from this cause.

Lack of uniform definitions of accidents and statistical methods makes comparisons for different countries extremely difficult. The imperfect statistics available, which are almost exactly comparable despite slight variations in the definition of "fatality" and in computing the number of full time workers, place the United States first in coal mining accidents (Table v); and the

situation is approximately the same in other forms of mining. The fatality rate in American bituminous mines has declined little if at all, while the fatality rate in anthracite mines has increased; and the rate for both types of mines was in 1931 the highest since 1920. This is also largely true of gold and silver mining, although commendable progress has been made in accident prevention in other forms of mining.

The high accident rates in American mining are sometimes attributed to especially dangerous conditions. This explanation is scarcely tenable in view of the much deeper working in European mines with the much greater danger from flooding and the other hazards of deep mine operations. When the fatality rates are computed per million tons mined, the American showing is improved, especially for bituminous mines. American bituminous mines in 1930 yielded 289,000 tons of coal per man killed, while British mines produced only 277,000 tons, French about 200,000 tons, Belgian 155,000 tons and Prussian 129,000 tons per fatality. The greater efficiency of the machinery and methods used in American coal mines is often cited as an extenuating circumstance if not an actual justi-

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TABLE IV

PERCENTAGE DISTRIBUTION OF FATALITIES BY MAJOR CAUSES OF FATAL MINING ACCIDENTS, UNITED STATES, 1916-30

	FALLS OF OVER- BURDEN, ROOF, QUARRY MATERIAL, ORE OR COAL	EXPLO- SIVES	HAULAGE AND HANDLING OF ROCK, ORE OR COAL	FALLS OF PERSONS	ELEC- TRICITY	MA- CHINERY	GAS AND DUST EXPLO- SIONS	OTHER CAUSES
1916								
Metal mines	32.28	12.77	10.04	14.64	3.73	2.58	—	23.96
Coal mines	47.85	6.56	20.89	1.39	4.35	1.89	10.15	6.92
Quarries	19.08	16.18	19.66	8.09	4.05	16.76	—	16.18
1917								
Metal mines	26.17	9.27	10.33	13.15	2.23	2.00	—	36.85
Coal mines	45.63	4.08	22.17	0.78	3.56	2.41	13.35	8.02
Quarries	18.32	16.03	24.43	11.45	1.52	15.27	—	12.98
1925								
Metal mines	31.26	14.02	16.18	12.12	5.39	2.16	—	18.87
Coal mines	48.34	4.57	17.95	0.67	4.48	2.01	15.44	6.54
Quarries	22.82	13.43	16.78	10.07	4.02	18.12	—	14.76
1928								
Metal mines	32.24	7.69	14.65	12.45	3.67	2.93	—	26.37
Coal mines	49.08	3.40	18.48	0.41	4.27	1.79	17.28	5.29
Quarries	24.37	7.56	15.13	15.97	5.88	17.65	—	13.44
1929								
Metal mines	35.14	10.86	14.86	11.71	2.29	3.14	—	22.00
Coal mines	54.05	4.02	20.76	0.87	4.30	1.87	8.92	5.21
Quarries	15.08	13.49	20.64	9.52	4.76	17.46	—	19.05
1930								
Metal mines	30.63	14.39	11.44	14.39	3.69	2.58	—	22.88
Coal mines	52.50	3.78	17.55	0.24	4.26	2.86	12.80	6.01
Quarries	22.86	13.33	15.23	8.57	3.81	18.10	—	18.10

Source: United States, Bureau of Mines, "Metal-mine Accidents in the United States: 1930," *Bulletin*, no. 362 (1932), and "Quarry Accidents in the United States during the Calendar Year 1930," *Bulletin*, no. 366 (1932).

TABLE V

COMPARATIVE ACCIDENT STATISTICS FOR COAL MINES IN THE UNITED STATES, GREAT BRITAIN, FRANCE, BELGIUM AND PRUSSIA, 1922-30*

YEAR	UNITED STATES			GREAT BRITAIN	FRANCE	BELGIUM	PRUSSIA
	BITUMINOUS	ANTHRACITE	TOTAL				
DEATH RATES PER THOUSAND FULL TIME 300-DAY WORKERS							
1922	5.16	3.81	4.90	1.18	0.87	0.91	
1923	4.65	3.62	4.39	1.23	0.97	1.07	
1924	5.39	3.39	4.80	1.16	1.03	1.18	
1925	4.79	4.12	4.65	1.22	1.24	0.90	2.68
1926	4.86	3.37	4.50		1.09	0.97	2.38
1927	4.60	3.94	4.43	1.35	0.98	1.30	2.28
1928	4.90	3.85	4.64	1.27	1.12	1.02	2.07
1929	4.63	4.24	4.54	1.31	1.15	1.29	2.19
1930	5.26	4.22	5.00	1.30		1.23	3.09
PRODUCTION IN THOUSANDS OF SHORT TONS PER DEATH							
1922	251	182	240	259	186	165	
1923	289	183	267	245	186	144	
1924	254	177	238	257	176	127	
1925	284	155	260	247	150	173	107
1926	278	186	261	226	181	175	142
1927	297	164	268	257	201	130	151
1928	290	169	265	277	190	179	174
1929	314	153	278	277	200	148	176
1930	289	156	260	277		155	139

For coal mines only. Where no figures are given no complete data are available.

* This table covers both underground and surface employees. Where no figures are given no complete data are available.
Source: United States, Bureau of Mines, *Coal-mine Fatalities in August, 1932*, C. M. F. no. 14 (1932) Table 7.

fication for the appallingly high accident rates; but the fact is that the greater production per man per day in American mines is largely due to thicker veins of coal and shallower workings. More attention to safety of roofs and other conditions and less attention to big production per man would reduce fatal and disabling accidents without adding much if anything to the costs per ton of producing coal, including compensation for deaths and disabilities. Safety work is more necessary in mining than in other industries because the hazards to life and limb are highest. It is also more difficult because the hazards are so frequently regarded as unavoidable and mining operations are usually carried on where proper supervision and enforcement of safety laws and rules are difficult or impossible.

In most European countries mining legislation is more comprehensive and more strictly enforced than in the United States. All American mining states have mine safety laws ranging from fairly good to excellent, but the enforcement is usually far from satisfactory. The most important step to be taken in the mine safety movement is to make all mine inspectors civil service appointees and to transform the status of mine inspection from a political job to a humane and technical engineering job.

One necessity for the guidance of safety workers is more detailed and accurate statistics. The United States Bureau of Labor Statistics and the International Association of Industrial Accident Boards and Commissions have performed notable services in securing agreements on definitions of terms and methods of statistical computation of accident frequency and severity rates. The National Safety Council, an organization of employers, has done much to induce employers to accept the standards agreed upon and to report their accidents in accordance with these standards. The United States Bureau of Mines has helped state agencies in securing standard accident reports and at last has begun to compile statistics of non-fatal accidents. It is necessary that all mines and quarries should be required to report the man hours worked, all lost time accidents and the causes and results of such accidents. More complete statistics will help in the work of eliminating preventable accidents and will improve means of estimating the effectiveness of safety work.

Some progress has been made in reducing mining accidents. Credit for this in the United States belongs primarily to the state compensation acts and enforcing agencies, aided by the

United States Bureau of Mines. This bureau's mine rescue work has given much publicity to the extremely hazardous nature of mining, especially coal mining, and to the methods of preventing most mine casualties. The efforts of individual employers and of the organization of employers in the National Safety Council to reduce mine and quarry accidents deserve high praise. Without compulsory legislation and active enforcement, however, it would have been impossible for the minority of enlightened employers effectively to decrease accident rates, especially severity rates, as fatal and serious accidents are most difficult to prevent because large expenditures are usually required.

ROYAL MEEKER

See: MINING; ACCIDENTS; ACCIDENTS, INDUSTRIAL; INDUSTRIAL HAZARDS; SAFETY MOVEMENT; WORKMEN'S COMPENSATION; LABOR LEGISLATION AND LAW.

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MINING LAW. Modern mining laws may be divided into two major groups. The first grouping has as its basis the assumption that minerals form an integral part of real property and that therefore only the landowner or someone given permission by him may prospect for minerals or exploit any mines discovered. In the second group the right to all minerals is reserved to the state and declared a royal prerogative. This right may take various forms: it may involve the state's direct right to mineral resources, so that it is entitled to begin mining operations without notice at any point either directly or through a third party to whom it has assigned its rights; or the state may have only the authority to establish a subjective right through an act of sovereignty by virtue of which the lessee, which may be the state itself, is permitted to exploit the mineral resources in a certain area. Such a lease may be at the discretion of the authorities, the latter selecting the bidder who seems most suitable (concession system); or there may be free prospecting for minerals, the person discovering a mineral deposit being entitled to a lease or to the property. The latter is the so-called system of free mining. Even where mineral rights are a part of real property they may be separated from landownership. The separation may be of a spatial nature, as in English law, the landowner transferring to the mining interests certain strata of his land; or a limited right, a *jus in re aliena*, may be set up, as in German law, permitting the mining of certain specified minerals on the plot of land.

The legal distinction between mineral rights vested in the state and those associated with landownership involves not only the person holding these rights but in at least equal degree the nature of the rights enjoyed. If they are associated with landownership they are like private land in general directly subject to private law. If they are the state's prerogative, however, no private rights are as a rule involved; there is rather a public prohibition of the exploitation of mineral resources. Even when the state enjoys such rights from the beginning or where in any particular case it or a private individual obtains such rights through governmental grant, there

exists no immediate right over the minerals but rather a right of appropriation; that is, the exclusive authority to remove the minerals from the earth, convert them into movable chattels and thus obtain ownership of them.

Although these two systems are very different juridically, from the economic point of view the system of landownership mineral rights may approach that of the state prerogative very closely, wherever the state is a landowner. In such a situation the mineral rights of the state are based upon its ownership of the land and it can exercise them by mining the land itself, by granting certain persons the right of exploitation or, finally, by throwing open its land to prospecting and granting anyone discovering a deposit a claim to the transfer of the land or a right to the minerals found. On the other hand, when practically all land is privately owned, the differences between the two systems are important. If all minerals belong to the landowner, the mining interests must reach an agreement with him; as a rule this can be effected only upon the payment of large royalties, while frequently it is impossible to come to any terms. At best the state can coerce the refractory landowner by expropriation, as provided under certain circumstances in the British Mines (Working Facilities and Support) Act of 1923. Modern legal concepts, however, hold that such expropriation may be resorted to only in exceptional cases when required by public interest, while the landowner must receive compensation for the loss of his rights. But if mineral rights are a prerogative of the state, it may grant them without asking the landowner's consent. The question of confiscation is not involved, for the minerals never belonged to the landowner; the latter has therefore no claim to compensation for any loss of rights but solely for actual damages to the surface of the ground caused by the prospecting for new deposits or by mining operations. It follows that the system of state prerogatives facilitates considerably the discovery of new deposits.

Whether the free mining or the concession is introduced within the prerogative system or upon state land depends upon the extent to which governmental intervention in business is held desirable. Obviously where free mining obtains the state has but little influence, for it must allow everyone to prospect, granting the finder the right to the mine. The maximum allowable extent and content of the latter right are fixed in advance by law in order to exclude

any arbitrariness on the part of the authorities; this leads of course to schematism in administration. In the concession system, on the contrary, the state selects a qualified prospector and the best concessionaire; the concession's size and content and the charges upon it are fixed largely at the discretion of the authorities. Thus the latter can adapt the grant to the circumstances of the individual case, granting extensive rights, for example, to a powerful financial group that is ready to undertake the geological survey and mining exploitation of unexplored areas, while a small entrepreneur who plans to operate only a specific mine is given a correspondingly limited concession. On the other hand, the concession system involves the danger that an imprudent or corrupt administration may through ignorance, arbitrariness or chicanery repress business enterprise.

There is no fundamental difference between the legal aspects of the various systems, especially in regard to the transfer of mining rights. Wherever they are derived from landownership they are treated of course like the land; moreover they usually enjoy also the same legal character even in countries where mineral rights have been declared a prerogative of the state. Mining rights, such as ownership and concessions, granted by the state are treated exactly like real property; they are recorded in the land register and may be mortgaged or dealt with in any other way characteristic of real property. Sometimes the transfer of rights is made conditional, however, upon governmental approval. One legal difference between regalian and landowner mining rights is derived from the fact that mining is impossible as a rule without the use of the surface of the ground, which is necessary for shafts, hoists, plants to dress the ores, mine railways and the like. The right to use the surface of the ground exists directly when the mine owner and landowner are identical, and if the former derives his mining rights from the latter he acquires at the same time the right to any necessary use of the surface. This follows directly from a reasonable interpretation of the contract of sale, for it would be contradictory for the landowner to grant the mine owner the right to exploit the mine while denying him the opportunity to get at it. The situation is different in state prerogative mining. There the mine owner has been granted mining rights by the state without asking the consent of the landowner, and thus the state must aid the mine owner in obtaining the necessary use of the surface area

if it cannot be secured by mutual agreement. This is ordinarily done by condemnation of the surface area, and in many cases provision is made for facilitating the usual process where mines are involved. Such laws proceed from the assumption that the promotion of mining lies in the public interest and that therefore expropriation for such purposes is always permissible, provided there are no special reasons of public interest against it in any individual case.

The legal basis upon which mining rests often determines the monetary charges upon it. Anyone deriving his mining rights from a private landowner owes royalties only to him and not the state; in regard to the latter he is subject solely to general tax legislation. Anyone who has obtained his mining rights from the state either because the state owns the land or because mineral rights are its prerogative has in many cases to pay special mining royalties.

The question of whether there is an obligation to engage in mining operations depends again upon the nature of mining rights. As a rule the landowner is not obligated to exploit his property for useful ends; mining or the refusal to mine when this right goes with the land is within his discretion, just as he has the right to let his land lie fallow. On the other hand, anyone who obtains his mining rights from the state must usually exercise them in order to retain them. In the age of mercantilism the state even claimed from its mining prerogative the right of detailed supervision of private mining activities, the so-called principle of direction.

Special forms of companies, such as the German *Gewerkschaft* and the mining partnership in Anglo-American law, have been developed for mining operations under both systems. Because of the indeterminate capital requirements involved in the industry they are usually characterized by the regulation that the partners may be called upon through majority vote for more money.

Irrespective of the legal basis for mining rights all civilized countries have established thorough regulations for the technical side of mining operations. They are founded upon the general sovereignty of the state, by virtue of which it is obligated to shield the lives and health of miners and of inhabitants upon the surface from danger and to protect the nation's economy against damage caused by reckless exploitation and similar abuses. Mining legislation as a rule does not apply equally to all substances taken from the earth but only to those requiring mining opera-

tions. Thus quarries, peat cutting, clay and gravel pits and the like are usually excepted from the safety regulations applicable to mining proper. Moreover they are included under the heading of real property even when valuable minerals, such as ores, salts, coal and the like, are part of the state prerogative. And even some of these, which are obtained only through mining operations, as, for example, potash salts, have sometimes been declared exempt from the prerogative, because their economic importance was not recognized at a time when the demarcation between prerogative minerals and those belonging to real property was fixed by statute. In some countries the non-regalian minerals have been subsequently declared a state prerogative in so far as private rights founded upon older laws do not exist.

The evolution of mining legislation as it occurs in the history of mining law depended largely upon whether or not the extraction of minerals was considered a normal use of the soil. Where it was so considered, there was no immediate occasion for depriving the landowner of it and mining law became merely a subdivision of the general land law. Special regulations were necessary solely because of the peculiar dangers of mining and were similar in nature to those regulating the use of a plot of land for manufacturing purposes. Where, however, mining was not so considered, the right to mine did not appertain to the land. This was particularly true when the extraction of minerals was in principle regarded as more valuable than the ordinary cultivation of the soil; the trend of such a development was to compel a differentiation between landownership and the rights of mineral extraction, for it was found that the private landowner's control of mineral resources made mining upon a large scale difficult.

In the ancient world among the Greeks and Romans mining was done largely upon the state domains. Operations were carried on either by the state or by its lessees, while in some cases a system approximating in its final results that of free mining developed upon the state lands; as, for example, in the Attic mines of Laurium and in the mining districts of Vipasca (Spain) under the Roman Empire. The extraction of minerals upon private land was of slight importance and was confined largely to quarries and the like. Thus there was no occasion to separate the rights of mining from those of land tenure or to assign the former to the state; nor is there any conclusive evidence that this was done. Two

constitutions dating from 382 A.D. and 384 A.D. (*Codex theodosianus*: bk. x, ch. xix, sects. 10-11) may be cited to show that no such separation took place: they merely grant the mine operator the right to work a mineral deposit in an adjacent plot of land upon payment of the tithe and do not proclaim a general state mineral prerogative. Accordingly they do not exclude the landowner's right to extract any minerals which he may discover upon his own land.

State mining prerogatives developed about the eleventh century, chiefly in Germany. Germanic land law did not recognize any private ownership as unlimited in concept as that of the Roman law. All private property was merely a right of usufruct granted by the king or another feudal lord, and since the normal use of the soil consisted of agriculture the rights granted to the landholder went no deeper than did the plow. The interior of the earth belonged to the king, the final landowner; and the right to use it was a royal prerogative.

This evolution of a royal prerogative was aided by two economic factors: first, mining penetrated to ever increasing depths, becoming more and more of a specialized art of which the landowner was ignorant; secondly, the existing mines no longer satisfied the need for metals. There was therefore a demand for the opening of new mines, whereas agricultural land was still abundant. From this situation the theory developed that mining was more valuable than the ordinary cultivation of the soil. Finally, landowners could not be depended upon to open new mines, which could be done only by trained miners. The owners of the prerogatives proclaimed free mining to a steadily increasing extent, so that the miner could prospect for minerals and as soon as he discovered any could lay claim to a grant, getting the right to the extractable minerals within the area upon payment of a royalty. During the later Middle Ages this condition of prerogatives and free mining prevailed throughout Germany. The same juridic state of affairs was recognized in principle in France. It could, however, be only partially enforced in practise against the opposition of the large landowners. In the period of the absolute monarchy and of mercantilism the crown in so far as it was able to enforce its royal mineral prerogative abandoned the principle of free mining and endeavored instead to have the state monopolize all French mining in favor of individuals or certain companies.

Under Norman rule the royal mining prerog-

ative was recognized in principle even in England. It was undisputed throughout the kingdom for the mines royal, that is, for gold and silver, but the kings claimed it for baser metals as well. In the great Case of Mines under Queen Elizabeth the court recognized the royal prerogative as extending at least to those ores of base metals that contained admixtures of gold or silver. The acts of Parliament of 1688 (William and Mary, ch. 30) confined the crown's rights to gold and silver exclusively. Both royal prerogative and free mining existed with respect to tin mining in Cornwall, Devon and the Forest of Dean, just as under German law. With local exceptions, however, practically all minerals in England have been an attribute of landownership since 1688, as there are no gold or silver mines in the country.

In modern times comprehensive mining laws have developed. The oldest legislation of this sort is contained in the *Allgemeines Landrecht für die preussischen Staaten* drawn up at the initiative of Frederick the Great but not completed until 1794 and in the French mining law voted by the National Assembly in 1791. Both of these laws were, however, imperfect: in maintaining the direction system the Prussian law continued to evidence the spirit of mercantilism; the French law gave the mining operator too insecure a juridic position to permit his risking the investment of the capital necessary for modern mining. The French law of 1810, which is still in force, was the first law to recognize that modern mining requires two things: first, a secure legal basis for the erection of costly mining plants, to consist of irrevocably alienated mining property or at least of a concession granted for a number of decades; second, freedom from governmental tutelage—the limitation of the state's intervention to safety police measures. The law of 1810 developed from the ideas of economic liberalism and arose through the strong personal influence of Napoleon. Its basic principles were adopted in German legislation about the middle of the nineteenth century and were combined with the concept of free mining that had prevailed in Germany from the Middle Ages. This combination led to an unprecedented and excessive expansion of German mining; many more mines than were required were erected to produce the two minerals especially important for Germany, coal and potash. As a result at the beginning of the twentieth century free mining had to be annulled in large part for these two minerals.

The German or the French system or combinations of both have formed the basis of legislation concerning minerals in other European countries and in South America, where the prevailing laws are the Spanish and Portuguese with their wide application of the regalian principle. Contact with Anglo-American law and the need to develop mineral resources led in the course of the nineteenth century especially in Mexico to modifications in favor of the landowner and foreign miners. The present tendency, however, seems to be toward a return to the old Spanish system, and minerals formerly exempted from state ownership have been declared national property. Thus Chile has reserved petroleum and saltpeter to the state in so far as private rights have not been established; and Mexico, which expressly excluded petroleum from the state's prerogative as late as 1909, declared it in 1917 and in 1925 the property of the state where no positive acts of ownership had already been asserted. The Mexican law was modified to some extent in 1926 and 1927. The general trend indicated is due in part to the necessity of preserving certain mineral resources and in part to the desire to eliminate extensive foreign ownership and exploitation of native mineral lands. The value of the latter as sources of state revenue is also a determining factor in this policy. In Brazil, however, the influence of Anglo-American law is in the ascendant and an act of 1921 gives the ownership of certain minerals formerly vested in the state to the landholders.

The United States as well as the British dominions and colonies in America and Australia took over together with the common law the principle that minerals were *pars fundi*, even extending it to include the mines royal (gold and silver). The Roman-Dutch law applies in South Africa, but in this respect it agrees with the common law. A situation very similar to that obtaining on the continent of Europe was attained, as far as economic results were concerned, by virtue of the fact that most of the newly opened lands belonged to the state. These lands are known in the United States as the public domain and in the British Empire as crownlands.

Mining law in the United States is based upon the common law, the laws of the several states and federal legislation. The public domain is subject to the jurisdiction of the federal government; and the first legislation dealing with minerals located upon it was contained in the ordinance of May 20, 1785, which reserved one

third of all the gold, silver, lead and copper mines on the land deeded by the government. In 1807 the lead mines of Missouri were reserved from sale and were to be leased for short terms. The failure of the leasing system led, from 1829 on, to the sale of mineral lands. With the discovery of gold in California and other parts of the far west the absence of established law led, however, in the various mining districts to the growth of independent local regulations drawn up by the miners themselves. The disposition of valuable mineral lands was carried out under these laws, the basic doctrine of which was that discovery and development of a mine were the foundation of a property right in it; but the act of 1866 established free mining on the public domain and eliminated the payment of royalties for the exploitation of mineral resources, and these principles were followed in subsequent federal legislation. The old district mining laws and the right accruing under them were in large part recognized or formally reenacted by the state and federal governments. The mining operator making a strike stakes a claim and reports it to the authorities, thereby obtaining the right to protection of possession (possessory claim) and after the expenditure of a certain amount of labor to full ownership of the plot of land upon which the mine is located. The American law of the public domain has to a certain extent departed from the principle of the common law that minerals always belong to the owner of the surface land, for it grants the owner of a lode claim so-called extralateral rights, the authority to pursue beyond his boundaries into the adjacent plot a vein that has its apex in his own.

The extraordinarily diversified legislation of the British Empire makes considerable use of the principle of free mining on crownland, giving the free miner the right to a claim under provisions similar to the American law. In addition the concession system is often used, the state reserving the right to grant mining leases on crownland to suitable applicants at its own discretion.

After the rebirth of mercantilist ideas following the World War, there set in a reaction in mining law. Concession grants have been impeded by administrative practises and by amendments to the law, while their acceptance has been made dependent upon the assumption of oppressive fixed charges and governmental rights of supervision. This was the pattern of the Italian mining law of 1927.

The mining law of Soviet Russia is thoroughly permeated with liberal ideas. The law differentiates between known deposits and those which are as yet unknown. The former have become state property through the socialization of private property, being worked either by the state or leased to private entrepreneurs for exploitation. Free mining applies, however, to unknown deposits. Prospecting is legal and anyone discovering and uncovering a mineral deposit is entitled to a concession good until the deposit is exhausted.

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See: MINING; MINING ACCIDENTS; LAND TENURE; PUBLIC DOMAIN; CONCESSIONS.

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MINISTERIAL RESPONSIBILITY. See CABINET GOVERNMENT.

MINORITIES, NATIONAL. The term national minority is applied to a distinct ethnic group with an individual national and cultural character living within a state which is dominated by another nationality and which is viewed by the latter as the particular expression of its own individuality. Although there are national minorities which actually constitute the ruling and privileged groups within a state, current usage has restricted the application of the term national minority to those which are in a defensive position.

The difficult problem of national minorities is an outgrowth of the development of modern nationalism. On the one hand, modern nationalism has served to strengthen the feeling of kinship of the national minority to its mother country and, on the other hand, it has brought about a greater and more passionate national assertiveness in the minority as a reaction to the oppressive and exaggerated nationalism of the ruling group. This form of national oppression has received support from the common recognition of the modern doctrine of popular sovereignty. The popular will, according to this doctrine, revealed through majority decisions at the polls or in representative assemblies, is decisive for all matters of state. Majorities brought about by this sort of political technique are, theoretically speaking, variable and dependent upon changes in political groupings or upon the success or failure of political leaders. The national minority, however, must be viewed as an essentially static element in the state and the adherence of an individual to a minority group as organic and non-political in nature. Thus the minority cannot gain new adherents as do other political groups and within the play of forces in the parliamentary-democratic structure has no chance to attain an eventual majority. There is great danger moreover that in all the crucial questions which seem really to unite the members of the group the national minority will find

itself confronted with the united opposition of all other parties and groups within the state. Although the minority may in itself be made up of a variety of subgroups reflecting different attitudes toward many political questions, it is the transcendence of such inner conflicts within the minority, when faced with critical national problems, which evokes more violent aggressiveness on the part of the dominant national group.

Many erroneous concepts as to the nature of a national minority are found in current literature. The concept which views all national minorities as the outcome of annexations or other territorial changes is false, for the origin of a national minority can often be traced to some mass migration in the remote past, subsequently reenforced by individual migrations. Likewise misleading is the view which applies the designation national minority only to groups which have aspirations to break away from an existing political state. There are states, clearly confronted with a minorities problem, whose minority groups entertain no such desires for political change. This erroneous concept of the nature of a national minority also precludes the existence of diaspora minorities for whom a territorially determined separatism is altogether out of the question. On the other hand, an attempt is made to consider the "loyalty" of an ethnic group as the distinguishing mark of its minority character and more especially to make the enjoyment of its minority rights dependent on the display of such a feeling of loyalty. By introducing a criterion which for practical purposes is unreliable the ruling nationality seeks to find a pretext whereby it can free itself from the international obligations which it may have assumed. Moreover the "disloyalty" of a national minority, where the charge can seriously be made, is in many cases much more likely to be the result of an immoral and illegal policy of political oppression on the part of the state than the sound basis for the continuation or the more energetic application of such oppression.

There are certain objective and subjective factors which may truly be said to constitute the characteristics of a national minority. Objectively, a national minority is distinguished by the possession of a common cultural and spiritual heritage which finds expression in a separate language, literature, press and theater as well as in a variety of organizations, parties and other forms of cultural and social activity. The extent and number of such organizations and institu-

tions are naturally determined not only by the national minority itself but also by external conditions and forces, particularly by the latitude given by the state to the development of such communal activities. An apparent tranquillity produced by an oppressive state policy and designed very frequently to deceive international public opinion often conceals for the outsider the existence of a truly national minority life. In such cases secret societies, even though they constitute a minority within the minority, serve as objective symptoms of the force and persistence of the national individuality.

Before there can be an evaluation of such sociological manifestations as these organizations, secret societies and committees as symptoms of the distinctive life of the national minority, it must be ascertained how far they are genuine expressions of the psychic attitudes and characteristic subjective will of the national minority. Such attitudes are manifested positively in love and devotion to the national heritage and in the desire to perpetuate and foster it within the closed communal life of the national group. In order to be more than a mere ethnographic sport the national minority must possess at least a minimum of united will to defend its culture against all violent attacks and all dangers of assimilation. It must be conscious moreover of the impossibility of fusing its own traditions with those of the dominant nationality or of other nationalities within the state.

In addition to intolerance of the states and the fanaticism of the national groups other undeniable difficulties are involved in border line cases of minorities. Some national groups, because of numerical insignificance or the primitive or fragmentary character of their culture, cannot properly be termed national minorities. Where such a backward minority group, whether urban, agrarian or proletarian, has become joined with a national group far superior in power, wealth and richness of social and cultural organization, certain conditions have arisen which without the force of political pressure have made it impossible for the minority permanently to maintain itself. In such cases the minority does not undertake the struggle against assimilation or else soon gives it up. In contemporary European states the national minorities which are striving to attain a definite standard of minority rights and cultural autonomy are particularly anxious to be distinguished from these smaller groups. The postulate of cultural autonomy, in particular, has become associated

with certain criteria of cultural capacity for autonomy.

A distinction must be made between a national minority which exists in mere scattered groups and one which represents a geographically separated or historically differentiated division of a larger nationality possessing its own national state elsewhere. Where an important nationality is represented in another state by a very small or perhaps historically backward minority, the denial of the national affiliation of the minority with its mother country and its claims to the rights of a national minority is wholly unjustified. Another type of national minority is found in a state like Czechoslovakia, which is made up solely of minorities. The Czechs alone do not constitute a majority of the population. The German elements, which make up 23 percent of the total population, have been designated by President Masaryk as a "constituent factor" of the state and can only formally be called a national minority. The same is true of national groups in the so-called multinational states, where the state is not identified with any one nationality but occupies a neutral position above national and cultural differences.

Most of the attempted classifications of national minorities have been made only for purposes of propaganda. Entirely relative and, from a legal standpoint insignificant, is the distinction made by Polish writers between strong and weak minorities. Hungarian writers have distinguished between minorities created by territorial cession and those which have arisen through past migrations. Similarly, the Germans have introduced the classification of "permanent" and "accidental" minorities. The former include minorities which either because of geographical location or because they are made up of diaspora groups cannot seriously hope for eventual political reunion with their mother countries. The latter are those which, through political change brought about, for example, by a war, have lost contact with the mother country or, as in the case of the Italian irredenta, have not yet become united with it. Here the hopes for union with the mother country are possible of realization.

New majority-minority relations were created by the great shifting of populations brought about by nineteenth century industrialism. There appeared the phenomenon of a fluctuating population which never acquired a fixed home in the newly populated regions. Members of the dominant nationality of the state as a result often come to constitute a minority in par-

ticular districts and lay claim to the rights of such a minority. Settlements of soldiers, officials or seasonal agricultural laborers are also examples of accidental minorities and lead to a distinction between permanently domiciled minority groups and other uprooted minorities. In a formerly unilingual district such distinctions, apparently only theoretical and often over-refined, frequently result in practical consequences of great significance. For the recognition of the minority entails also the recognition of its language; legal and constitutional entanglements often result which complicate the administration, give rise to additional fiscal burdens and have other patent political and moral influences.

The phenomenon of non-territorial minorities presents obvious difficulties. During the Middle Ages, under the impact of the migrations, the principle of personality was recognized. Legal forms were contingent upon the personality of the individual, who could demand trial by his own national law even though he were outside the bounds of his native land (*quo jure vivis?*). In modern times, however, the territorial principle has become dominant and law is now more and more identified with state and territory. Switzerland presents a typical illustration of the limited degree in which national conflicts in multilingual states can be settled by territorial adjustment. Here the attempt was made to secure peace between the various nationalities by breaking up the land into numerous small and autonomous subdistricts. These districts represent for the most part ethnic units with a territorial differentiation of administrative organization. Under this system, however, there is altogether insufficient protection for the national rights of the mobile elements in alien cantons. Such dynamic factors as scattered settlements and mobility and fluctuation of population produce conditions which are not to be solved on a purely territorial basis but demand solution according to the principle of personality.

Modern efforts to guarantee the rights of national minorities by international law may be traced to earlier movements to protect religious minorities against intolerance and persecution by the incorporation of such provisions into peace treaties. In the final act of the Congress of Vienna in 1815 and at the Congress of Berlin in 1878 there are discernible, partly in connection with religious problems, attempts to safeguard the individuality of national groups living under alien national domination. Their practical re-

sults, however, were slight. Moreover the general cultural trend during the nineteenth century was not favorable to any theoretical justification of the rights of national minorities. In Germany the influence of Hegel's combination of the idea of *Volksgeist* with étatism was an important factor in preventing the development of such theories. In Italy Mazzini exerted a similar influence through his linking of the national ideal and the desire for a national state. In fact the "principle of nationality," set up as the slogan for European politics by Napoleon III, signified for non-territorial minorities a policy of persecution rather than one of toleration and liberation. It was no accident therefore that the problem of national minorities received most attention not in national states but in the multinational Hapsburg dominions. The personality principle of national rights, already developed by the bourgeois theoreticians Herrnrit and Bernatzik, was systematized and combined with Marxist ideology by the socialists Karl Renner and Otto Bauer. Their work has had significant influence on contemporary theories of minority rights, particularly on the doctrine of cultural autonomy. By means of the organization of parties, administrative offices and elections along national lines the attempt was made to counteract the tendency toward the break up of the Austro-Hungarian Empire. These important efforts of the Austrian Marxists received no attention among the German Social Democrats. They were, on the other hand, very actively discussed among the Russian socialists, while Polish and Russian Jews played a significant mediating role in this connection. It is well known, however, that the nationalities policy of Lenin and Stalin after the Russian Revolution and their return to attempts at a territorial solution are in a large measure to be understood in the light of their sharp opposition to the school of Renner and Bauer and of the friction between the extremist and moderate wings of the Marxian movement.

At the Paris Peace Conference the minorities problem came to the fore as soon as it appeared evident that the peaceful and satisfactory realization of Wilson's principle of self-determination was impossible, if for no other than geographical and territorial reasons. The regulations finally adopted regarding the minorities problem were the result of the activities of private Jewish delegations and expressed the instinctive opposition of Anglo-Saxon legal philosophy to the Romanic and continental concept

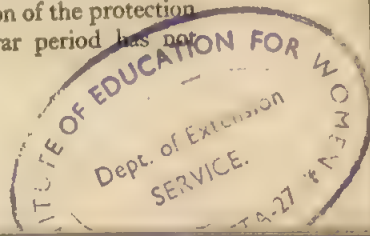
of a centralized, absolute and omnipotent state.

The practical provisions for the protection of minorities were incorporated in the treaty between the Allied and Associated Powers and Poland. This treaty was made the basis for all the agreements with the other east European states, and states which later joined the League of Nations were obliged to make similar declarations as prerequisites for their admission. There came into existence by international guaranty a certain modicum of minority rights binding for sixteen European states, of which not one, however, is a great power or is in western Europe. By virtue of this guaranty by the League complaints against violations of minority rights are directed to the League and through it are also turned over to the World Court at The Hague. The national minority, not being recognized as a party to international law, cannot bring the charges directly before the League.

The material content of the provisions of the Paris Treaty regarding the protection of minorities is very meager. The protection of the constitutional and actual equality of all citizens "without distinction of birth, nationality, language, race, or religion" provides the nucleus of the system. The unrestricted use of any national language in private life is guaranteed as are also "adequate facilities" for its employment in the courts of law. Members of a minority group are given the equal right to establish and conduct at their own expense social, religious and philanthropic agencies as well as schools and other educational institutions and to have unrestricted freedom in the use of their own language and the practise of their own religion. The state is obligated, whenever there is a foreign language group of "considerable proportion," to make possible elementary instruction in that language and to allot for this purpose a fair portion of the public expenditures for education, religion and social welfare.

The question as to how far these minority treaties recognize the national minority as a collective organism is debatable. The granting of autonomy rights as demanded by the Jewish delegations was definitely rejected. The system as adopted represents rather a recognition of the cumulative individual rights of members of the minority group. The provisions are elastic and the obligations of the state are often so restricted with respect to territory that they are of no service to the minority as a whole.

The international regulation of the protection of minorities in the post-war period has not



gone beyond the limits set by the peace conference. A few bilateral treaties concerning the protection of minorities have been executed. The most important of these is the Geneva Convention of May 15, 1922, between Germany and Poland, which regulates for a period of fifteen years the minorities problems raised by the division of Upper Silesia. Membership in a minority with special reference to the problem of schools is here determined on purely subjective grounds. The individual has the right freely to declare his adherence to this or that national group and to receive the educational privileges which go with such a declaration. His decision is neither to be opposed nor to be subjected to any further investigation. Provision is made also for the creation of administrative agencies designed to settle all cases of dispute. These committees are composed of an equal number of representatives of each nationality and presided over by a neutral representative of the League of Nations.

Certain usages in procedure for the presentation of minority problems to the League have developed. Since the national minority does not possess the right to make an accusation itself, there has evolved a procedure for the presentation of petitions. Every incoming complaint is examined by the general secretary as to its formal *recevabilité*. It then is sent to the government of the state against whom the complaint is directed and the state is given the right to make its observations on the charges. The complaint is then examined by a committee of three, consisting of the president and two members of the Council of the League, as to whether or not the petition is to be presented to the Council. Experience has shown that such committees have usually sided with the state against the accusing minority and have thus hindered the League from fulfilling its function. According to von Truhart 314 complaints coming from nineteen nationalities in thirteen states were presented to the League during the period between 1920 and 1931; of these only twenty-one finally reached the League Council. In no single case did the Council give the minority its full due. Even such shocking instances as the agrarian expropriations in Latvia and the Polish punitive expeditions against the Ukrainians in eastern Galicia were completely ignored by the League. Growing disillusionment and bitterness against the League have developed among the minorities, which were very evident in the sessions of the Nationalities Congress.

The lack of concern on the part of the League with regard to one of its most important functions is to be explained by a combination of factors. The actual content of the minorities treaties is not only unsatisfactory but lends itself to too flexible interpretation. The indifference of the League bureaucracy, the hesitation of the members of the Council in the face of political complications, the protracted formalities of procedure, the absence of a standing minorities commission which could by its own investigation arrive at an independent and unbiased view of the causes of conflict, the persistence of hate engendered during the war—all these conditions have in practise rendered ineffectual the League's guaranty of national minority rights, although the total absence of any international supervision, it is true, might possibly have led to still more flagrant nationalist excesses against minorities than those that have thus far occurred. Suggestions for reform of the system of minorities protection are therefore limited for the most part to expediting and providing greater publicity for the preliminary procedure, to the creation of a permanent minorities commission and to the more general application of the protective obligations. Among the states which have assumed these post-war obligations there are, on the other hand, strong tendencies to throw off their commitments at the first opportune moment. The weakening of the authority of the League of Nations, apparent along other lines, also jeopardizes the stability of the whole Geneva system of minorities rights.

In view of these considerations the question has repeatedly been raised as to whether or not the Versailles system has done more harm than good to the cause of minority rights. The subordination of the state to international regulation and the preferential treatment accorded to individual states have been viewed as oppressive and have served only further to inflame the nationalism of the ruling group and to render more difficult an agreement with the minority. Enormous agrarian expropriations in most of the eastern states, mass closing of schools, confiscation of churches and clubrooms, unpunished public terror, press restrictions, the prevention of free election propaganda and the falsification of statistics and election results are but a few typical illustrations of minority complaints.

Few effective reforms have been attempted with the view of stopping up the sources of dissatisfaction. The general poisoning of the political atmosphere as well as the internal

weakness of the newly created states has thus far stood in the way of such attempts. Some efforts at a constructive solution of these difficulties are revealed in the school legislation in Prussia, in the experiments in local administration in the compact German areas in Czechoslovakia and in attempts at cultural autonomy in Estonia and school autonomy in Latvia. Hungary and Rumania have endeavored only casually to bring the minority groups into the state administration, chiefly by means of special ministries or state secretaries for minority problems. In Hungary, Latvia and Czechoslovakia representatives of the minorities have at times occupied places in the cabinet. Such instances, often exaggerated for propaganda purposes, do not, however, justify a belief that the minorities problem has been solved satisfactorily in any of these countries. Numerous crises everywhere have revealed how little has been attempted in the way of a real constructive and effectual solution of the problem. The situation in the Balkans, particularly with reference to the still unsettled Macedonian question and the internal situation in Jugoslavia, is beset with the most dangerous potentialities.

Attempts at the solution of the minorities problem in the Soviet Union are quite unique. According to the census of 1926 there are in the Union of Soviet Socialist Republics approximately 185 ethnic groups speaking 147 languages. The Communists have consciously worked toward mobilizing this motley array of nationalities against capitalist society. These efforts are conditioned by fundamental Marxist principles and operate on the basis of the principle of territoriality. The Soviet Union is divided into republics and autonomous districts and the attempt is made, especially in the southern and eastern regions, to attach a sentimental side to the social revolution by an artificial stimulation of national consciousness among primitive peoples. This has served also to fill the Orient with a revolutionary spirit and to provide the colonial peoples throughout the world with a slogan for their revolt against the dominant classes and nations.

Minorities have often attempted to wring concessions from ruling states by a combination of their forces, as, for example, in the case of the minority bloc organized for a short while in the Polish Sejm. More permanent in character are the efforts to create some form of international cooperation of minorities. The first such organization was the Francophile Union des Natio-

nalités formed in 1912 in Paris by the Lithuanian J. Gabrys and the Frenchman J. Pélissier. During the World War the center of the movement was shifted to Switzerland. Nationalities congresses were held in 1912 and 1915 in Paris and in 1916 in Lausanne. It became increasingly clear, however, that the realization of the programs of this movement, based as it was on the old nationality principle, would run counter to the interests of the great powers, especially Great Britain. France too lost all desire to support these activities, and shortly after the World War this movement, which had no particular interest in the problems of national minorities, disintegrated.

A new organization was formed in 1925 through the activities of the Baltic German Ewald Ammende, who succeeded in bringing together all the organized minority groups in Europe outside of Soviet Russia. Annual congresses were held from 1926 to 1931 in Geneva and in 1932 in Vienna. The congress, presided over continuously since its inception by the former Slovenian deputy in the Rumanian Parliament, Josip Wilfan, has rendered an important service in propagating the idea of cultural autonomy.

Resort to the international guaranty of minority rights must necessarily lead to the revival in a new form of the long contested principle of intervention. The leaders of the minorities become accustomed to seek protection of their rights outside their own states and before an international tribunal. Even those who deem such procedure to be unavoidable under the circumstances cannot deny that it produces a severe psychological strain on the relations between the minority and majority and is likely to lead to retaliation against the minority, especially by the executive power. Although it is highly desirable that the inadequate system for the protection of minorities should be reformed and perfected as far as possible, there is unanimity of opinion among the minorities that it provides only an expedient of last resort and that any satisfactory regulation within the state is to be preferred to such ineffectual external control.

Remedies based on constitutional changes within the state are, however, also only partly effective. The revolution in the political structure of eastern Europe has brought with it many disastrous consequences for the minorities. The very dissolution of large political, cultural and economic units into mutually mistrustful and hostile smaller states has given rise to innumerable

able difficulties. The creation of a host of new conditions and regulations in the fields of law, currency, tariffs, markets, sources for raw materials, and education has served to concentrate the effects of the general crisis on the national minorities in particular.

Only rarely has a radical solution of the minorities question through the exchange of populations been attempted. It was tried systematically by Greece and Turkey, resulting in enormous sacrifices in life and health. There were also one-sided exchanges of population between Poland and Germany and between Hungary and its neighbors, as a consequence of which many Germans and Magyars were forced to return to their mother countries. It is uncertain whether any technically better system can be arranged in the future for the mass shifting of minorities, which has thus far always been contrary to the will of the population concerned. In all cases there is a risk that such measures may constitute an assault upon the sense of attachment to the home and a danger to the organic health of the population. Measures of this sort, which always reappear in political programs, usually run counter to the most elementary humanitarian principles and betray no respect for an organically developed national group.

Modern advances in communication have made possible a greater amount of spiritual contact between minorities and the mother country; the question as to how far political relations between them is legitimate is a matter of controversy. The distinction between political and non-political in this connection is fraught with much practical difficulty. The enormous extension of the competence of the state into cultural and economic spheres has considerably decreased the sphere of the non-political. Moreover, although the nationalist struggles take place over questions which may be termed non-political, they are nevertheless imponderables which are indirectly of tremendous significance for the minority policy.

The conflicts engendered by minorities problems always threaten to bring about international complications. The solidarity of national groups regardless of political frontiers has become so significant a psychological factor that governments can no longer disregard it as they could in Bismarck's day. Such difficulties moreover cannot be solved by the traditional methods of the old diplomacy; nor do they come within the sphere of international or constitutional law. They can be dealt with only through a new and

independent body of law dealing with corporate groups (*Körperschaftsrecht*) and based upon investigations into the national group as a personality and into the peculiarities of its national character. But while such a body of law may be recognized, protected and guaranteed by the states or by the society of states as the bearer of the *jus gentium*, it cannot be produced by them. The question therefore as to whether the legal problems of national minorities are more national than international is only relative and must be determined for each individual case. Fundamentally this alternative is irrelevant. As a result of the dominance of the principle of the omnipotence of the state, it is the state which must develop these new legal forms of minority life. Europe is now faced with a restoration of the old state absolutism with the additional factor that the system of plebiscitary democracy of the majorities has taken the place of the formerly neutral monarchy. The fundamental attack upon the theory of state sovereignty represented in some of the currents in international law, which is responsible for the creation of the League of Nations, has broken down and has made way for the intensification of the theory of sovereignty and the principle of state omnipotence. This has produced a state of extreme danger for the national minorities, which are being forced into a position where they will not only come to represent the interests of their own nationality but will become the guardians of a great and decisive political idea. The consequences will reach far beyond the particular question of national minorities; scarcely a problem in western culture will remain untouched by it.

MAX HILDEBERT BOEHM

See: NATIONALISM; NATIONALITY; IRREDENTISM; MAJORITY RULE; MINORITY RIGHTS; AUTONOMY; SELF-DETERMINATION, NATIONAL; FEDERALISM; REGIONALISM; BOUNDARIES; ETHNOCENTRISM; ETHNIC COMMUNITIES; INTOLERANCE; PERSECUTION; MASS EXPULSION; NEAR EASTERN PROBLEM; DIASPORA; JEWISH AUTONOMY; ANTISEMITISM.

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MINORITY REPRESENTATION. See MINORITY RIGHTS; PROPORTIONAL REPRESENTATION.

MINORITY RIGHTS. Political history, in all but the very recent period, is a record of the successful attempts of a comparatively small minority of the population to impose its scheme of government and its norms of statecraft on the unprivileged masses. In the aristocratic and oligarchic republics of antiquity and the Middle Ages the minority governed directly in its own interests; with the rise of a centralized autocracy minority privileges became contingent upon the favor of the monarch. In either case the existence of a privileged minority was taken for granted, with a few scattered exceptions, until the victories of democratic theory and program in the eighteenth and nineteenth centuries (see MAJORITY RULE). Today there is no nation which at some stage of its recent history has not experienced the power of the majority in formulating the social and economic policy of the entire collectivity and in regulating the conduct of the individual members. As de Tocqueville

prophesied in the early stages of the democratic movement, the dominant majority has so ruthlessly crushed all opposition that resistance to the *vox populi* exacts more courage than the older forms of rebellion against the despotic autocrat.

The opposition, which has manifested itself in a variety of quarters against the so-called "tyranny of the majority," has taken a number of forms. First of all there was the group of reactionaries, headed by Burke in England, de Maistre in France, Adam Müller in Germany and Gentz in Austria, which sought to preserve the older concept of privilege by undermining the mechanistic and quantitative presuppositions of the revolutionary ideologists and legislators. Their emphasis on the mystical rather than the rational nature of the social organism and on the non-cataclysmic process of history has been echoed repeatedly in the subsequent period; and as in the case of its early exponents this rationalization of minority rights has not been altogether free from the charges of special pleading. Gierke's version of organicist theory and historicism, although elaborated quite logically in the course of his attack on the "atomistic" preoccupation with mechanical number, placed a serviceable ideological weapon in the hands of the Prussian aristocracy and plutocracy in their resistance to agitation for democratic reform. Jellinek's pioneer treatise, *Das Recht der Nationalitäten*, may likewise, in view of the concern of the author over the fate of the German element in former Austria, be somewhat discounted as an *oeuvre de circonstance*, although the emphasis has clearly shifted away from the older type of privileged minority to the dilemma of national minorities (see MINORITIES, NATIONAL).

Allied to this group of antirevolutionary, anti-democratic political theorists are the intellectual aristocrats, genuine ideologists like Kant, Humboldt, Schläzer and Fichte, who rebelled at the presuppositions of the arithmeticians as to the dwelling place of ultimate social and political wisdom. "What is the majority?" asks Schiller testily, in a manner prophetic of Nietzsche. "The majority is the negation of reason. Understanding has always been confined to the few. . . . Where the majority is triumphant and stupidity is the final arbiter, the state sooner or later must go under." Ibsen, epitomizing in the character of Doctor Stockman the antipathy of a later generation to prevailing bourgeois ideals, reviled the majority as always wrong. Roscher, typifying the reaction against classical

bourgeois economics, attempted to exorcise the new monster-tyrant: omnipresent, ruthless and irresponsible, with countless eyes and ears and hands and of superhuman physical strength.

Within the ranks of the democratic movement itself the principle of majority rule has found numerous opponents. To intransigent individualists like Benjamin Constant, Laboulaye, Rotteck and Herbert Spencer the "divine right of parliaments," basing itself on the mandates of a numerical majority of electors, represented but an infinitesimal advance over the older type of authoritarianism. As a result the cause of minority rights frequently overlapped throughout the nineteenth century with individualism, although in the strict sense of the word a minority implies some less volatile and more ponderable unit than a minority of one.

Moreover in the actual process of setting up new constitutions the most orthodox reformers were not unmindful of the difficulties involved in reconciling the basic democratic dogma of the *volonté générale* with the equally basic democratic premise of the fundamental rights of the individual. Most of the early contract theorists had insisted that in matters involving the natural rights of the citizen the decision should be unanimous, and even Loyseau and Hobbes had recognized that there were certain primordial rights not subject to change by ordinary legislation. The distinction between ordinary legislation and constitutional enactments involving more fundamental questions of natural rights was first applied in the provisions regarding amendments to the federal constitution and to those of the states in the United States. As a compromise between the ideal of unanimity and the efficiency of simple majority decision a qualified majority composed of three fifths, two thirds or three fourths was specified. Other features of the American political system—such as the veto power of the executive, which can be overridden only by a two-thirds majority, the system of representation in the upper house according to state or county units rather than numerical population, the power of the courts to declare invalid ordinary legislation that does not conform to the provisions of the fundamental constitution—represent early efforts, subsequently imitated in other countries, to reach a compromise between ordinary majority rule legislation and protection of fundamental minority rights.

The early political controversies of the United States illustrate likewise the peculiar aspect

which the antimajority attitude may assume in a federalistic state. The question of the rights of a minority of individual citizens tends to be replaced by the question of the rights of a minority of component units. Calhoun's systematically formulated thesis of the "concurrent majority," which repudiated the prevailing technique of arithmetical tabulation and insisted on unanimous acceptance by all the minority units, represents a reinvocation of the older postulate of unanimity in the interests of state sovereignty and ultimately of an economic institution. The ideal of unanimity has been invoked also by the Polish political thinkers Świętochowski and Lutosławski, who have sought to eulogize the principle, if not the practise, of the old Polish *liberum veto*.

The actual working out of democratic ideology and program revealed in two other spheres rather serious inadequacies in the principle of majority rule. Even after the entire population had been accorded the suffrage, it was still apparent that the political opinions and economic demands of vast sections of the people remained to all intents and purposes inarticulate. The system of representation worked out by the early democratic institutionalists became the target of attack by numerous reformers whose primary aim was somehow to secure representation in the legislative assemblies for the voters whose candidate had suffered defeat in the local election. While the various types of proportional representation (*q.v.*) seek to preserve the essential features of the existing framework by guaranteeing to each minority a number of seats corresponding to its numerical strength, the champions of functional representation (*q.v.*), despairing of the atomistic character of the democratic type of legislative bodies, recommend modified or altogether new institutional agencies which will correspond more nearly to the pluralistic economic groupings of present day society. The basic affinities between these two pro-minority systems is indicated by the fact that Léon Duguit found little difficulty in making the transition from the camp of functional to that of proportional representation; while Raymond Saleilles with equal facility reversed the process.

Intimately related to the question of the rights of electoral minorities is that of the rights of minorities in the legislative assemblies; a minority of representatives may be rendered, to all practical purposes at least, as inarticulate as a minority of electors. Where, as on the continent, the working of the party system presupposes an

omnibus majority, synthetically arrived at by a process of bargaining between the various minority blocs, each group is afforded an opportunity of becoming articulate. In a two-party or even three-party system, on the other hand, the minority group of representatives is expected, at least according to the precept voiced by Cobden, to rest content with its one prerogative; namely, that of winning enough adherents to transform it into a majority. Although, as Redlich has pointed out, the conventions of parliamentary procedure are aimed in large part at the protection of such minorities and although momentary influence may be gained, as was the case with the Parnell minority under Gladstone, by strategic ad hoc alliances, the most effective weapons which parliamentary minorities have grasped in the protection of their rights have been the threat of withdrawal from the legislative sessions and parliamentary obstruction particularly in the form of filibusters or occasionally, as was the case with the German minority in the Austro-Hungarian assembly, by the display or threat of physical force.

The premises of the majority rule principle have been contested not only within the ranks of the democratic movement itself and by the nostalgic champions of the prerevolutionary order but also by the spokesmen of broader social programs which sought to go beyond the liberal compromise of the eighteenth century. To early utopian socialists, like Proudhon, conscious of the overwhelming antipathy of orthodox political groups, democracy was synonymous with the "Tyranny of the majority." While the early English socialists accepted most of the democratic premises and agitated for universal suffrage, continental socialism, although realizing the value of the legislative assembly as a platform for propaganda and agitation, has tended rather to discount the benefits to be derived from a parliamentary majority composed of bourgeois exploiters. The conception of the dynamic class conscious minority, which in the interests of the true majority of the population should overthrow the democratic state, shifted the emphasis from the theoretical rights of the minority to the active responsibilities of the minority. The idea of the dynamic élite, as set off against the inert majority comprising the masses, has been systematically elaborated not only by Sorel and the syndicalists but by such disparate groups as the "integral" nationalists stemming from Barrès and the disciples of Pareto who set up the corporative state of Fascist Italy. Although the em-

phasis in all of these later antidemocratic movements is on the superior élan and efficiency of the minority, the assumption of rights is throughout implicit.

LADISLAS KONOPCZYŃSKI

See: MAJORITY RULE; DEMOCRACY; DICTATORSHIP; MINORITIES, NATIONAL; INDIVIDUALISM; REPRESENTATION; PROPORTIONAL REPRESENTATION; FUNCTIONAL REPRESENTATION; FEDERALISM; REGIONALISM; PARTIES, POLITICAL; VOTING; PASSIVE RESISTANCE AND NON-COOPERATION; REVOLUTION AND COUNTER-REVOLUTION; PROCEDURE, PARLIAMENTARY; OBSTRUCTION, PARLIAMENTARY.

Consult: Calhoun, John C., *A Disquisition on Government*, ed. by R. K. Cralle (Columbia, S. C. 1851) p. 1-107; Jelinek, G., *Das Recht der Minoritäten* (Vienna 1898); Saripolos, N., *La démocratie et l'élection proportionnelle*, 2 vols. (Paris 1899) vol. i; Starosolski, W., *Das Majoritätsprinzip*, Wiener staatswissenschaftliche Studien, vol. xiii, no. ii (Vienna 1916); Ruffini, F., *Guerra e riforme costituzionali* (Turin 1920); Haymann, F., "Die Mehrheitsentscheidung, ihr Sinn und ihre Schranke" in *Festschrift für Rudolf Stammler* (Berlin 1926) p. 395-476; Ruffini Avondo, E., *Il principio maggioritario, profilo storico* (Turin 1927); Konopczyński, W., *Le liberum veto, étude sur le développement du principe majoritaire*, Institut des Études Slaves, Bibliothèque polonaise, vol. ii (Paris 1930).

MIQUEL, JOHANNES VON (1828-1901), German statesman. Miquel's father was of French-Portuguese, his mother of lower Saxon stock. This double inheritance may account for the many sided development of his intellectual career, ranging from youthful communism through the national liberalism of the Bismarck era to the agrarian conservatism of his later years. In his brief period of contact with Marxian thought he learned to view political and social doctrine in the light of the ever changing forms of economic organization, while his early separation from the economic materialism of Marx released this historical relativism for positive participation in the actual affairs of the state. A National Liberal politician at the time of the founding of the empire, Miquel was thus able to be the chief sponsor of the constitutional provisions of 1867 which assured the rights of parliament in opposition to Bismarck and at the same time to collaborate with the latter in the task of building the empire, particularly in welding the divergent parts of Germany into one legal entity. His conservative turn began with his habituation to the independence of thought and action which he acquired as chief burgo-master of Osnabrück and Frankfort. Finally, his early sympathies with the agrarian class made him receptive to the protective tariff orientation

of Bismarck, which in turn influenced him still further in the direction of political conservatism.

Miquel's greatest achievement, however, was the Prussian tax reform enacted in 1891-93, which combining liberal ideas with conservative foresight in the introduction of income and property taxes was socially beneficial in that it eased the burden of the poorer classes without risking any too radical innovations. His attempt to reform imperial finances failed, but he was successful in disentangling those of the individual state from local finances. Although he was closely allied with the Prussian conservatives he sought in vain to restrain their extreme agrarian demands and finally passed on to his successor Bülow the task of reconciling the interests of rapidly advancing industry with the preservation of agriculture.

HANS HERZFELD

Works: *John von Miquels Reden*, ed. by W. Schultze and F. Thimme, 4 vols. (Halle 1911-14).

Consult: Guhl, Wilhelm, *Johannes von Miquel, ein Vorkämpfer deutscher Einheit* (Berlin 1928), with bibliography; Mommsen, Wilhelm, *Johannes Miquel* (Stuttgart 1928).

MIR. *See* VILLAGE COMMUNITY.

MIRABEAU, COMTE DE, HONORÉ GABRIEL RIQUETTI (1749-91), French statesman. At the outbreak of the French Revolution the undisciplined but gifted son of *l'ami des hommes* had traveled widely and given some indication of his restless genius in a number of writings, including *Des lettres de cachet et des prisons d'état* (written in 1778; published in 2 vols., Hamburg 1782), *De la monarchie prussienne sous Frédéric le Grand* (written in collaboration with Mauvillon; 4 vols., London 1788) and various studies of such social and economic problems as the discount bank, the navigation of the Scheldt, the Negro traffic and the condition of the Jews in France. His notorious reputation, acquired as a result of numerous scandals and sojourns in prison for debt or other offenses, outweighed his capacities in the eyes of the nobility of Aix-en-Provence, who refused to consider his candidacy for the Estates General. He succeeded, however, in winning election by the third estate. In the assembly of that order at Versailles he soon became an outstanding personality, rivaled only by Sieyès. From the first his fiery speeches and brilliant repartee drew the sympathy of the nation, and his popularity became permanently established by his famous oration of June 23,

when with Bailly he led the struggle for the union of the orders into a single assembly.

Mirabeau's leadership of the National Assembly (1789-91) represents the irrepressible authority of superior powers overriding obstacles imposed by envious colleagues. His amazing fund of information, supplied partly by his early travels, partly by a circle of willing allies—Clavière, Étienne Dumont, Reybaz of Geneva, Samuel Romilly, Abbé Lamourette, his devoted secretary Pellenc—made the tireless Mirabeau an indispensable counselor on all questions of policy, whether they affected the constitution, finance, the church, foreign affairs or national economy. Perhaps his supreme asset was his oratorical genius, which transmuted the speeches prepared for him by lieutenants. Scarcely less striking, however, was his diplomatic skill, which he had ample opportunity to exercise after the Assembly, in order to shackle his influence, passed a decree in November, 1789, barring deputies from ministerial posts. The complete separation of powers thus established virtually forced Mirabeau, who was keenly conscious of the necessity of cooperation and compromise between legislature and executive, to turn to political intrigue. Finally, for a financial consideration he became the king's secret adviser. The king's bribe, tendered in the hope that Mirabeau's tremendous popularity might be made available for the royal cause, "bought" him but, according to his own expression, did not cause him "to sell himself." Sacrificing no essential element of his original program he steered a difficult course, counseling the monarch in statesmanlike letters delivered through Comte de La Marck and managing to direct the Assembly by obtaining a preponderant influence in its committees, which in fact controlled the government.

From June 23, 1789, until his early death in April, 1791, Mirabeau's general policy aimed consistently at the reconciliation of the traditional monarchy with the new liberty. He remained throughout a sincere champion of the oppressed, of complete religious and intellectual freedom, of equality before the law; the eloquent preamble of the Declaration of the Rights of Man was apparently his work, although he had at first opposed its promulgation as inopportune. It was, however, characteristic of his extraordinary sense of moderation that he combined with liberalism a deep appreciation of the social need for authority and order and that from the first he favored the conferment of extensive

powers upon the executive. The realism displayed in the delicate equilibrium between these extremes constitutes his claim to greatness. While in certain matters, such as religious policy, he was more liberal and in others, such as the right of war and peace, more favorable to the monarchy, his ideas inspired the principal acts of the Assembly. As president of the diplomatic committee, which directed foreign policy over the head of the king's minister Montmorin, he pursued a policy of realistic pacifism, reflecting an admirable balance between patriotism and the humanitarian cosmopolitanism of the *philosophes*. He recommended the conciliation of the German princes of Alsace by indemnities for the abrogation of their seigniorial rights and on several occasions prevented the annexation of the papal state of Avignon—policies in line with his major objective of averting complications which might hamper internal reform.

Mirabeau was never sufficiently free from petty obstructions to exert the full powers of his mind. With the abrupt termination of perhaps the finest *carrière manquée* in history the illusion of a possible compromise between monarchy and liberty vanished and the revolution approached a more radical stage, at the same time that it was deprived of its most stabilizing influence.

PHILIPPE SAGNAC

Other important works: *Lettres originales de Mirabeau écrites du donjon de Vincennes pendant les années 1777, 1778, 1779, 1780*, 4 vols. (Paris 1792); *Lettres du comte de Mirabeau à un de ses amis en Allemagne (1786-1790)*, ed. by J. Mauvillon (Brunswick ? 1792); *Correspondance entre le comte de Mirabeau et le comte de La Marck (1789-1791)*, ed. by A. de Bacourt, 3 vols. (Paris 1851). Mirabeau's journal, *Courrier de Provence pour servir de suite aux lettres du comte de Mirabeau à ses commettants*, was published in 17 vols. (Paris 1789-91).

Consult: Peuchet, J., *Mémoires sur Mirabeau et son époque*, 4 vols. (Paris 1824); *Mémoires biographiques, littéraires et politiques de Mirabeau, écrits par lui-même, par son père, son oncle et son fils adoptif*, ed. by L. de Montigny, 8 vols. (Paris 1834-35). English translation, 4 vols. (London 1835-36); Loménie, Louis L. de and Charles de, *Les Mirabeau*, 5 vols. (Paris 1879-91); Stern, Alfred, *Das Leben Mirabeaus*, 2 vols. (Berlin 1889); Erdmannsdörfer, B., *Mirabeau* (Bielefeld 1900); Guibal, G., *Mirabeau et la Provence en 1789*, 2 vols. (vol. i 2nd ed., Paris 1891-1901); Joly, A., *Les procès de Mirabeau en Provence* (Paris 1863); Fling, Fred Morrow, *Mirabeau and the French Revolution* (New York 1908); Sagnac, Philippe, "La Révolution" in Lavis, Ernest, *L'histoire de la France contemporaine*, 10 vols. (Paris 1920-22) vol. i, p. 275-77; Aulard, A., *Les orateurs de la Révolution*, 2 vols. (2nd ed., Paris 1905-07) vol. i.

MIRABEAU, MARQUIS DE, VICTOR RIQUETTI (1715-89), French social and political critic and physiocrat, generally called "the elder Mirabeau." In harmony with the tradition of his family Mirabeau pursued a military career until 1743, when he retired with the cross of St. Louis and of Malta. Purchasing the estate of Le Bignon near Nemours and a *hôtel* in Paris, he devoted himself henceforth to political economy. As earlier in Provence he had associated with Vauvenargues, the poet Lefranc de Pompidan and the procurer general Monclar, so at Paris from 1765 on his salon was a meeting place for the outstanding *économistes*—Quesnay, Turgot and Dupont de Nemours.

At the outset of his career as a student Mirabeau followed the great opponents of the policy of Louis XIV—Boisguillebert, Vauban and Fénelon. His first work, *Mémoire concernant l'utilité des états provinciaux* (Rome, France 1750), was a critique of the system of centralized administration through the agency of the intendants—of the viceroys, as Law had called them—and a eulogy of the provincial estates of Brittany, Languedoc, Burgundy and Provence. The extension of his interests to the broader problems of social economy was signalized by the appearance of *L'ami des hommes, ou Traité de la population* (1756). This work, which presented a comprehensive system antedating the publication of Quesnay's system, is his masterpiece; Mirabeau was thereafter known as *l'ami des hommes*.

"The state is a tree; the roots are agriculture; the branches are industry; the leaves are commerce and the arts." In these characteristically graphic terms the book states a thesis, quite accurate for France—the organic dependence of all the various components of the nation upon agriculture. To revive agriculture, it continues, the soil must be divided: there are far too many large proprietors who consume their revenues as absentees in the cities or dissipate them on useless embellishments—kitchen gardens, hot-houses, orangeries—without giving a thought to production. Mirabeau deplores the decline of the "poor nobility," castigating the court aristocracy as "a true leech" upon the state. Luxury destroys morals and the latter are the "strings of the political instrument, whose laws are but their sounds." Religion, domestic virtues, patriotism but above all labor form the props of society. "Every man who lives in idleness is an obstacle to the state"; thus he defines and condemns the rentier. Because the national debt

"drains" the substance of the laborers Mirabeau recommends its redemption; an incidental benefit would be the lowering of the interest rate in private transactions. Mirabeau the provincial inveighs against gluttonous Paris, declaring that a portion of the wealth there accumulated should rightly be returned to the rural districts. He reverts to his strictures against the intendants, whom he depicts with much vehemence but considerable injustice as omnipotent intruders attaining power while still immature and beginning their pernicious careers by making fatal experiments.

The conception of international relations presented in *L'ami des hommes* recalls Abbé de Saint-Pierre and other eighteenth century cosmopolites. "The entire globe is contiguous, all countries are neighbors, all men are brothers." Huge armies, he says, ruin governments. But like his brother the bailiff, who was a well known seaman, and like a good Provençal he favors the navy, which protects commerce. The eulogies which England had received from Montesquieu and Voltaire were bestowed by Mirabeau upon the Dutch republic because of its preeminent role in the development of the navy and of international trade and its practise of religious toleration and liberty of the press. He demands liberalism even in colonial policy. That commercial liberty for the colonies would lead eventually to complete independence he prophesies as inevitable and natural. "The new world will certainly shake off the yoke of the old," he foresees in 1756.

Following this original synthesis Mirabeau published *Théorie de l'impôt* (Paris 1760), a stout defense of the physiocratic single tax intermixed with sagacious observations on taxation in general, and *Lettres sur les corvées* (1760). Subsequently as a disciple of Quesnay and one of the most important propagators of the latter's school he wrote in collaboration with him *Philosophie rurale* (3 vols., Amsterdam 1764; abr. ed. as *Éléments de la . . .*, 1 vol., The Hague 1767-68), a popularization of physiocratic doctrines. After *Instruction populaire, ou la science, ou les droits et les devoirs de l'homme* (Lausanne 1774) he continued to produce writings of lesser importance, some of which were published posthumously. He died in the midst of the revolution, for which both he and his son—Honoré Gabriel, the most famous of all the Mirabeaus—had helped Quesnay and Rousseau to prepare the social and economic principles. If not a great writer he remains an original and impulsive

spirit, who had a definite and profound influence upon his age.

PHILIPPE SAGNAC

Works: *L'ami des hommes, ou Traité de la population*, 8 vols. (Avignon 1756-60; 2nd ed., 3 vols., Paris 1758-60; new ed. by M. Rouxel, 1 vol., 1883). For a bibliography of his works, see *Mémoires de Mirabeau*, ed. by Lucas de Montigny, 10 vols. (Brussels 1834-36) vol. i, p. 226-29.

Consult: Loménie, Louis L. de and C. de, *Les Mirabeau*, 5 vols. (Paris 1879-91); Fling, Fred M., *Mirabeau and the French Revolution* (New York 1908), especially ch. vi; Ripert, H., *Le marquis de Mirabeau* (Paris 1901); Brocard, L., *Les doctrines économiques et sociales du marquis de Mirabeau dans L'ami des hommes* (Paris 1902); Oncken, A., *Der ältere Mirabeau und die ökonomische Gesellschaft in Bern*, *Berner Beiträge zur Geschichte der Nationalökonomie*, no. 1 (Berne 1886), and *Geschichte der Nationalökonomie*, *Hand- und Lehrbuch der Staatswissenschaften*, no. 2 (Leipzig 1902); Weulersse, G., *Le mouvement physiocratique en France de 1756 à 1770*, 2 vols. (Paris 1910); Lavergne, Léonce de, *Les économistes français du XVIII^e siècle* (Paris 1870) p. 112-67.

MIRANDA, FRANCISCO DE (1750-1816), Venezuelan revolutionary promoter. In 1783, after having served six years in the Spanish military service in the Old World and the New, Miranda fled in disgrace to the United States. He toured the country in 1783-84, discussed the American Revolution with Alexander Hamilton, Henry Knox and Samuel Adams and further stimulated a secret desire to liberate his native land from the rule of Spain. As a result of residence in France from 1792 to 1798, where he served as general in the army, he was profoundly impressed by the philosophy of the revolution. Miranda's economic ideas and his grounds for attacking the Spanish colonial system were leavened by the laissez faire principles of Turgot and Adam Smith. His reasoning about political rights was much influenced by Rousseau's *Contrat social*, while his views concerning the reversion of political rights to the people were based upon the philosophy of Locke. A democrat with aristocratic leanings, Miranda framed fantastic constitutions for an emancipated Spanish America, which showed the influence of Incan and Spanish institutions and yet were partly modeled after English law and custom.

His magnificent schemes remained on paper. From 1790 to 1808 he submitted plans for the revolutionizing of Spanish America to the governments of Great Britain, France and the United States; in 1806 he failed miserably, partly because of lack of aid, in a filibustering expedition led from New York City against Venezuela. He

played a leading part in bringing about the adoption of a declaration of independence by Venezuela in 1811; but when at a critical juncture his compatriots made him dictator he felt compelled, because a succession of calamities seemed to destroy the possibilities of victory, to surrender to the Spanish royalists in July, 1812. Nevertheless, his persistent pleas stimulated the interest of European cabinets in the commercial and political future of Spanish America, while his example long served as an inspiration to the revolutionists in the New World.

WILLIAM SPENCE ROBERTSON

Consult: Fragments from an XVIIIth Century Diary: the Travels and Adventures of . . . Miranda, compiled and tr. from Spanish ms. by J. H. Stabler (Caracas 1931); *Archivo del General Miranda*, vols. i-xii (Caracas 1929-31); Antepara, J. M., *South American Emancipation* (London 1810); Robertson, W. S., *The Life of Miranda*, 2 vols. (Chapel Hill, N. C. 1929); Parra-Pérez, C., *Miranda et la Révolution française* (Paris 1925).

MISCEGENATION is a term applied to intermarriage or illicit intercourse between members of different races. It is most likely to occur under colonial conditions where the new settlers are a group racially alien and composed entirely or almost entirely of men. In modern times miscegenation has generally been regarded with moral distaste by the white races, an attitude partly conditioned by the fact that the general relationship between the white and the darker races has been one of conqueror and conquered, of enslaver and enslaved or at best of master and servant. The great cultural differences between such races have also emphasized this so-called natural aversion. Imperial and commercial penetration into "backward" countries by European nations has sometimes led to the passage of prohibitory laws tending to maintain the superiority and authority of the small group of European settlers. The sentiment favoring these laws is generally stronger among the settlers than among the population of the home country. Such legislation or the use of the equally effective weapon of social ostracism of whites and the children of whites who contract miscegenetic marriages has been more widespread in Protestant colonies and countries than in those in which Catholic influence is strong, for Catholicism with its emphasis upon the essential equality of all before the church has tended to undermine racial prejudice. Moreover its desire to keep all social relationships within the control of the church has led it to condone and even to

encourage such mixed marriages so as to diminish the illicit relationships which would otherwise flourish. The Catholic position has been to a large extent adopted by modern Protestant missionaries.

In the Spanish American colonies marriages between Spaniards and Indians were at first forbidden, but as early as 1514 the prohibition was lifted and intermarriage encouraged in the hope that legitimate unions would induce the immigrants to settle permanently in the New World and would win the favor of the natives. The ineffectuality of the decree of 1514 is evidenced by its repetition in 1515 and 1556; although concubinage was common between Spaniards and Indians, legitimate relationships remained rare. Marriage between Spaniards and the Negroes who were imported was neither favored nor widespread.

In the French American colonies miscegenetic marriages were recognized in the seventeenth and the early eighteenth century. The famous *Code noir* of 1685 punished concubinage between a white man and a Negro slave where there was issue by a fine of 2000 pounds of sugar but provided that if the man married the woman, she became free and the children legitimate; the fine was also avoided. Where the man was the master of the slave the punishment was more severe. This provision met with opposition from the colonials, and in 1724 Louis xv decreed that in Louisiana no marriages between blacks and whites were to take place under penalties to be fixed at the discretion of the courts. There was no prohibition of marriage with the Indians. Despite the doctrine of equal rights which pervaded French thought in the second half of the eighteenth century, the year 1778 witnessed a prohibition against intermarriage within France itself. With the revolution of 1789, however, these prohibitions disappeared and the principle of non-discrimination has since been maintained in French colonies.

Early in the twentieth century local regulations designed to prevent miscegenetic marriages were inaugurated in the German colonies. In the year 1905 in German Southwest Africa the governor forbade marriages of whites with blacks and finally with mulattoes. In East Africa in 1906 the governor ordered officials not to register such marriages without his consent. Later on such marriages were forbidden in Samoa. The children of non-recognized unions were to be classed as blacks. These regulations were given no publicity, and it was only in 1912

that the matter was discussed in the Reichstag, which refused to sanction laws against intermarriage and passed a resolution upholding its legality.

British policy has been against legislation prohibiting marriage between blacks and whites. Popular sentiment, however, has acted as a severe check upon such intermarriage in most British possessions and dominions, although it has had little effect upon concubinage. The mixed population in South Africa is very large, and partly because the legislature recognized that this was the result of the many illicit relationships rather than of the few legitimate unions and partly because of missionary pressure a law was enacted in 1927 making extramarital relations between whites and Negroes a punishable offense.

The only extensive prohibition of miscegenation is to be found in the United States, where there has been a continuous development of such laws from earliest colonial times, due originally to the institution of slavery. Implied in the property right enjoyed by the owner of slaves was the possessory right not only in the slave but in his descendants. Illicit intercourse, promiscuously indulged in between Negro slaves and indentured white servants or other white persons, led to bastard issue, whose ownership could not readily be determined. Where free white women bore children by a Negro slave, the right of the owner of the male parent to any interest in the children was contested. Where Negro women bore bastards or legitimate children of white men, the question arose as to whether such children could be held in slavery. To settle such questions and to protect the owners of slaves in their property right to the issue there was enacted such legislation as the Maryland law of 1664, which provided that the issue of marriages between free born Englishwomen and Negro slaves should belong to the master of the slave and that the woman also should become the slave of the latter during the lifetime of her husband. Like all prohibitory laws this was violated, sometimes at the instigation of the master of the slave; and in 1681 there was passed an amendment to this statute which modified the earlier penalties but emphasized in stronger language the inconveniences and controversies which might arise concerning the issue of such marriages. At a very early date Virginia had laws providing special penalties for illicit intercourse between blacks and whites. In 1691 it passed a law providing that a white

woman having a bastard by a Negro or mulatto should pay a fine of £15 sterling or in default of payment be sold for five years; the bastard was to be bound by the church wardens until thirty years of age. It also punished marriage of a Negro, mulatto or Indian with a white person by the banishment of the latter. Massachusetts passed its law in 1705, punishing fornication on the part of a Negro with a white person and prohibiting marriage between such persons. Delaware in 1721, Pennsylvania in 1726 and North Carolina in 1741 similarly prohibited fornication or intermarriage.

Following the formation of the United States through the period ending with the Civil War Indiana in 1818, Maine in 1821, Tennessee in 1822, Illinois in 1829, Florida in 1832, Michigan in 1838, Washington territory in 1855 and Texas in 1858 passed laws forbidding illicit intercourse or marriage between the races. In the territory of Kansas such a law was passed in 1855 but was repealed by the state legislature in 1859. Massachusetts repealed the colonial statute, which had been retained, in 1843. New Mexico in 1866 and Washington in 1868 repealed its statute. Otherwise during the reconstruction period none of these laws against miscegenation were repealed; although they were for a time disregarded they remained upon the books. Statutes against miscegenation were repealed in Rhode Island in 1881, Maine in 1883, Michigan in 1883 and Ohio in 1887. Six states have held the matter to be of such importance that they have by constitutional enactment prohibited their legislatures from ever passing any law legalizing marriage between a white person and a Negro or a descendant of a Negro.

In 1932 thirty states forbade miscegenation; they were Alabama, Arizona, Arkansas, California, Colorado, Delaware, Florida, Georgia, Idaho, Indiana, Kentucky, Louisiana, Maryland, Mississippi, Missouri, Montana, Nebraska, Nevada, North Carolina, North Dakota, Oklahoma, Oregon, South Carolina, South Dakota, Tennessee, Texas, Utah, Virginia, West Virginia and Wyoming. The statutes of these states vary and further confusion arises from the decisions interpreting them. The differences consist in the definition of races other than white, in the provisions against intermarriage between persons of races other than white but differing among themselves, in the penalties provided for such intermarriage and in the status of the parties to and the issue of such marriage. The definition of races other than white with whom

intermarriage is prohibited is particularly loose and unscientific. Although there is no known method for ascertaining the difference between the blood of white persons and persons other than white, frequent references are made in the statutes to persons having presumably definite types of colored blood. So in Virginia the proscription was against one having any trace whatsoever of any blood other than Caucasian, a person with one sixteenth or less of Indian blood being considered white. Georgia passed a law making felonious and void the intermarriage of a white person and a person with an ascertainable trace of African, West Indian, Asiatic Indian or Mongolian blood. The statute contained elaborate provision for the ascertainment of race prior to the issuance of the marriage license. Whether through later discovery of the scientific absurdity of the law or because of the great expense involved in setting up the necessary laboratories, the law is not enforced. It remains, however, as the extreme expression of racial discrimination, its language "ascertainable trace" going beyond that used in any other state, some of which prohibit marriages between white persons and persons of African descent (Oklahoma and Texas) or between white persons and persons of Negro blood (Alabama, Maryland, North Carolina and Tennessee) or between white persons and persons having one fourth or more of Negro blood (Oregon, West Virginia) or one eighth or more (Florida, Indiana, Mississippi and North Dakota). Other statutes employ more general terms.

Furthermore restrictions are not confined alone to intermarriages between white persons and Negroes. Thirteen of the states—Virginia, Georgia, Mississippi, Missouri, Nebraska, South Dakota, Montana, Idaho, Utah, Wyoming, Nevada, California and Arizona—have laws against intermarriage between white persons and members of the Mongolian race, and six—Virginia, North Carolina, South Carolina, Arizona, Nevada and Georgia—have laws against intermarriage with Indians and their descendants. In North Carolina, Louisiana and Oklahoma marriages are forbidden between Negroes and Indians. Oklahoma also forbids intermarriage between Negroes, Indians and Mongolians. In order completely to insure the purity of their peoples some of the legislatures have added prohibitions against intermarriage with persons of the Malayan and Korean races (*sic* in the law) and with mestizos, Kanakas and half breeds.

The greatest number of states having laws

against intermarriage with Mongolians are in the west. There is, however, no correlation between the proportion of Negroes or other races to the total population and the presence of prohibitory laws. The proportion of Negroes, in 1930 for instance, varies from over 50 percent in Mississippi to less than 1 percent in eight of the states which have such laws (Idaho, Montana, Nevada, North Dakota, South Dakota, Wyoming, Utah and Oregon). The penalties provided for the violation of these laws vary from imprisonment for a few months to a term of ten years to fines ranging from small sums up to \$2000. In some states both penalties may be concurrently inflicted.

Grave questions arise with regard to the validity of these marriages, particularly where questions of interstate comity and law are involved. When they are contracted within a state having prohibitory laws by persons domiciled there, the statutes uniformly declare them void. Confusion occurs, however, in the attempt to apply these laws to marriages contracted outside of the state of domicile. The general axiom is that a marriage valid where made is valid everywhere, with the possible exception of incestuous or polygamous marriages and marriages whose nature is such as to shock the court entrusted with enforcing the policy of the state. In some of the states prohibiting miscegenetic marriages the courts have taken the view that they are contrary to the declared public policy and that the necessity of determining their invalidity transcends the rules of comity between the states. Nine of the states have statutes declaring that where both parties are domiciled within the state and leave it in order to evade the state prohibitory law, returning thereafter, their marriage shall be void. When, however, the parties have established a new domicile in the state where a valid marriage is celebrated, some of the states having prohibitory laws will recognize its validity. Texas goes to the extreme of punishing by imprisonment for from two to five years the parties to a miscegenetic marriage, no matter where contracted, if they continue to live together as man and wife within its borders. With regard to miscegenetic marriages contracted outside of and by persons domiciled outside of a state having such prohibitory laws it is probable that such marriage would be held to be valid, although invalid according to the law of the forum.

It is impossible to formulate any general rule with regard to the legitimacy of the issue of these

marriages. Where the marriage is declared void, as is the case in almost all the states, the offspring are automatically bastardized by the declaration of nullity; no statutory provision or judicial decision is necessary. Nevertheless, in some of the jurisdictions the issue might share in the estate by will although not by inheritance and might with due formality be adopted and legitimized.

Attacks on the constitutionality of these statutes have frequently been made on the ground that they contravene the provisions of article 1, section 10, of the constitution and the provisions of the Fourteenth Amendment. There has been no decision sustaining such laws by the Supreme Court of the United States, but the state courts in nine states have upheld them, basing their holdings upon the right of the state to govern the marriage contract and upon the denial to the federal government of the power to limit the states in their exercise of exclusive jurisdiction over the validity of marriage and the status arising from it. The constitutionality of the statutes has been upheld also upon the ground that they involve no discrimination in that the prohibition is equally enforceable against both the white person and the person of the other race. In two cases where the question of constitutionality arose before federal circuit courts it was held that state statutes providing punishment for residents of the state contracting miscegenetic marriages outside the state as well as in the state were not unconstitutional under the contract clause (art. 1, sect. 10), on the ground that marriage is not a contract within the meaning of the section. In another case a circuit court held such a statute constitutional and not in contravention of the Fourteenth Amendment, on the ground that the right to marry is not a privilege of citizens of the United States as such but of the citizen considered as the citizen of a state, which alone can legislate with regard to marriage; and a statute against miscegenation was held not to abridge the privileges of citizens of the United States.

So long as these views prevail and while the states retain exclusive control of marriages within their borders or of marriages wherever contracted by their citizens, such variety of laws with regard to miscegenetic marriages is likely to continue. The reasons for such regulations are obscure. Certainly the original basis of the prohibition has been lost. The socio-economic purposes plainly stated in the laws of the colonies no longer exist, and therefore since the

Civil War references in the statutes to property rights have totally disappeared. In recent years the legislatures and the courts have generally stated their purposes in terms of such social data as appeal to their particular bias or prejudice, such as the prevention of unholy alliances, contrary to the laws of God and nature, and the preservation of the so-called purity of the race. The increased proportion of mulattoes in states which have such laws would tend to indicate that the statutes have of themselves not deterred the amalgamation of the races. Legislation making concubinage and casual connection penal offenses has been particularly ineffective.

PHILIP WITTENBERG

See: MARRIAGE; INTERMARRIAGE; RACE MIXTURE; NATIVE POLICY; NEGRO PROBLEM; RACE CONFLICT; AMALGAMATION; CONCUBINAGE; ILLEGITIMACY.

Consult: Grentrup, T., *Die Rassenmischehen in den deutschen Kolonien*, Görres-Gesellschaft zur Pflege der Wissenschaft im Katholischen Deutschland, Sektion für Rechts- und Sozialwissenschaft, Veröffentlichungen, no. 25 (Paderborn 1914); Braun, G., *Zur Frage der Rechtsgültigkeit der Mischehen in den deutschen Schutzgebieten* (Greifswald 1912); Hubrich, E., "Die Mischehenfrage in den deutschen Kolonien" in *Zeitschrift für Politik*, vol. vi (1913) 498-506; Ravizza, A., "Matrimoni misti e meticci nella colonia Eritrea" in *Rivista d'Italia*, vol. xix (1916) pt. ii, 333-62; Olivier, Sidney, *The Anatomy of African Misery* (London 1927) p. 219-23; Woodson, C. G., "The Beginnings of the Miscegenation of the Whites and the Blacks" in *Journal of Negro History*, vol. iii (1918) 335-53; Stephenson, G. T., *Race Distinctions in American Law* (New York 1910) ch. vi; Reuter, E. B., *Race Mixture, Studies in Intermarriage and Miscegenation* (New York 1931), especially p. 73-103; Jenks, A. E., "The Legal Status of Negro-White Amalgamation in the United States" in *American Journal of Sociology*, vol. xxi (1915-16) 666-78; "Intermarriage with Negroes—a Survey of State Statutes" in *Yale Law Journal*, vol. xxxvi (1926-27) 858-66; *Negro Yearbook* (Tuskagee 1925) p. 241-43.

MISKAWAYHI, ABŪ 'ALĪ AHMAD (d. c. 1030), Moslem philosopher and historian. He served the vizier al-Muhallabi in Bagdad, which was at that time ruled by a Persian sultan, then became librarian to ibn-al-'Amīd I, vizier at Raiy; he subsequently entered the service of 'Aḍūḍ al-Dawla, sultan in Bagdad, and appears to have continued in office under Buwayhid sultans.

His chief work on ethics, *Tahdhīb al-akhlaq* (Reformation of character, Cairo 1882; new ed. 1908), is based on the *Ethics* of Aristotle, with some ideas derived from Plato; the treatment is adapted to the doctrines of Islam and the despotic

conception of the state. While Miskawayhi agrees with Plato that the philosopher should be ruler and that the unification of the citizens should be his chief aim he makes the maintenance of religion an important function of the king or caliph, whom he regards as the substitute for Mohammed or for God.

His most important work, *Tajarib al-Umam* (History of Miskawayhi; facsimile reproduction from MS., Gibb Memorial series, vol. vii 1, 5-6 Leyden and London 1909-17), is a universal history. For all periods up until nearly the end of the third Islamic century (beginning of the tenth century) it is merely an abridgment of Tabari's vast chronicle; but as the author approaches and enters his own time he bases it on the information given either by later writers or by state officials with whom he came in contact, especially his own chiefs, Muhallabi and ibn-al-'Amid i. He expresses the greatest admiration for the latter's system of administration, of which little more is known than that it aimed at safeguarding the interests of the cultivators, whose produce constituted the chief source of revenue. Miskawayhi is also a strong advocate of religious toleration, to which he attributes the prosperity of the caliphate when 'Aduḍ al-Dawla was "prince of princes."

Among Arabic historians he is almost unique in his power of reproducing scenes and portraying characters and appears to be absolutely free from either religious or sectarian bias. Although far better qualified for historical writing than Tabari, Miskawayhi never acquired his popularity, probably because the latter's work terminates shortly before the glory of the caliphate departed and a vast empire degenerated into a congeries of ephemeral and often mutually hostile states.

DAVID S. MARGOLIOUTH

Works: The portion of his history which covers the years 813-865 A.D. has been edited by M. J. de Goeje in his *Fragmenta historicorum arabicorum*, 2 vols. (Leyden 1869-71) vol. ii. The portion from 907-79 A.D. (the end) has been edited by H. F. Amedroz and translated by D. S. Margoliouth in *The Eclipse of the 'Abbasid Caliphate*, 7 vols. (Oxford 1920-21) vols. i-ii, iv-v, vii.

Consult: Margoliouth, D. S., *Lectures on Arabic Historians* (Calcutta 1930) p. 128-37; Caetani, L., "Preface" and Amedroz, H. F., "Notes on the Historian" in the Gibb Memorial edition of *Tajārib al-Umam or History of Ibn Miskawayh*, vol. vii, p. xi-xv and xvii-xxvii; Amedroz, H. F., "The *Tajārib al-Umam* of Abu 'Alī Miskawayh" in *Der Islam*, vol. v (1914) 335-57; Furlani, G., "L'etica di Ahmad ibn Muhammad ibn Maskawayh" in *Rivista di filosofia*, vol. x (1918) 32-47.

MISSULDEN, EDWARD (flourished 1608-54), English merchant and writer on economics. A prominent member of the Merchants Adventurers, Misselden served as their deputy governor at Delft from 1623 to 1633 and concurrently as a representative of the East India Company in its negotiations with the Dutch.

Misselden's first economic tract, *Free Trade or, the Meanes to Make Trade Flourish* (London 1622), was primarily a defense of the Merchants Adventurers. The organization of the King's Merchant Adventurers in 1614 had seriously threatened the Merchants Adventurers, and Misselden together with twenty-nine other members was compelled by distress to join the new company. But his cooperation seems doubtful since he was accused with "divers other false brethren" of exporting undressed cloth contrary to the company regulations. Although Cockayne's "Project" was a failure, the experiment had weakened the Merchants Adventurers. With the appointment of a standing committee on trade in 1622 Misselden apparently thought it necessary to write a defense of the old company. In his tract he attributed the alleged decay of trade to excessive consumption of foreign commodities, exportation of specie by the East India Company and defective searching in the cloth trade. He defended the corporate organization of foreign trade and implied that "seemly and orderly government" could be better provided by regulated than by joint stock companies. The India Company he particularly criticized for exporting bullion "out of Christendome," whence, he held, it never returned.

When Gerard de Malynes accused him of overlooking the "Mystery of exchange" as the chief cause of England's distress, Misselden replied in *The Circle of Commerce* (London 1623). In opposition to Malynes' par of exchange, an "old soil'd project," Misselden sets up a theory of exchange based on the "Ballance of Trade, an excellent and politique Invention." Although the metallic content of coins "directeth the price or value of the Exchanges, yet that price is greater or lesse according to the occasions of both parties contracting for the same." Completely reversing his earlier position concerning the India Company he now defends the exportation of specie on the reexportation theory, later elaborated by Thomas Mun, and develops the theory of the balance of trade. As contrasted with Malynes and Milles, Misselden's ideas may be called progressive; but he was not a profound thinker, and most of his

economic theory was developed in the interests of the Merchants Adventurers.

E. A. J. JOHNSON

Consult: Hewins, W. A. S., *English Trade and Finance* (London 1892) p. xxx-xxx; Suviranta, B., *The Theory of the Balance of Trade* (Helsingfors 1923); Viner, J., "English Theories of Foreign Trade before Adam Smith" in *Journal of Political Economy*, vol. xxxviii (1930) 249-301, 404-57; Seligman, E. R. A., *Curiosities of Early Economic Literature* (San Francisco 1920) p. ix-xi; Friis, Astrid, *Alderman Cockayne's Project* (Copenhagen 1927).

MISSIONS. Individuals or organized groups engaged in religious proselytism as a vocation represent a phenomenon which has been confined largely, but by no means entirely, to Christianity, Buddhism and Islam. This fact may be traced to qualities inherent, although in differing degrees, in the religions themselves. The missionary impulse derives from the idea that a specific religion possesses universal validity and from the consciousness of a spiritual or moral obligation to transmit its precepts. Since missions are by definition agencies for peaceful propagation, aiming to convert by teaching and persuasion, they are feasible only when the content of a religion is sufficiently independent of a particular ethnical or national institutional complex so that its diffusion may be conceived as an end distinct from political expansion. Throughout history missions have been frequently concomitant with such expansion or facilitated by it, but their very existence implies that the propagation of religion is considered a separate process requiring special emissaries and techniques. Where this conception is lacking, the dissemination of a religion, irrespective of its claim to universality, tends to become contingent upon more or less adventitious environmental factors. The theocratic elements in Chinese Confucianism and the symbiosis of Hinduism with the political and social fabric of India did not prevent the spread of the former to Japan and Korea or of the latter to the regions now included in Indo-China and Java; they have, however, except in isolated instances, stifled whatever impulse might have developed to initiate deliberate proselyting activity. In certain places and periods, as, for example, during the centuries immediately preceding and following the opening of the Christian era, Judaism has attracted to itself many non-Jews; but only infrequently has it produced specifically missionary agencies. Manichaeism, a distinctly missionary faith including in its membership those

who devoted themselves primarily to its propagation, has completely died out.

Even in the case of those religions which are most definitely proselyting, missionary activity has represented only one of several processes of expansion. Certain of the Moslem conquerors as well as the Christian Spaniards after their triumph over the Moors compelled a larger or smaller proportion of the subjugated population to become converted. More usually the vanquished have tended voluntarily to embrace the faith of their masters, for to it have attached social prestige and economic and political advantage; this motive appears to have operated powerfully, for example, in the acceptance of Islam by many subjects of Moslem conquerors. The same result may be produced by the peaceful conversion of a nation's natural leaders: in India King Asoka gave a very important impulse to the popularity of Buddhism; in Japan the adoption of Buddhism was favored by the example of the powerful Soga family and of Prince Shōtoku. Sometimes the prince or government has assisted more indirectly: many a Buddhist prince dispatched missionaries to other lands, and Christian missionaries, for instance, those who operated in the Spanish possessions in the Americas and the Philippines, have been supported by royal financial grants and military aid. Commercial contacts also may have as a concomitant the extension of a faith. Merchants become, incidentally, missionaries. Partly through them, to give only two of many possible illustrations, Islam gained a foothold along the Arab trade routes in the Malay Peninsula and the East Indies and Christianity made its initial contacts in some places in northern Europe. When two peoples at widely different stages of cultural development are brought closely together, those of the more nearly primitive level tend to adopt the religion of the more advanced civilization. Thus the Teutonic invaders of the Roman world were inclined to adopt the Christian faith, along with some other elements of the culture of the Roman provincials among whom they settled. So too in the centuries of its greatest prosperity in China, Buddhism made headway in Japan as an apparently integral part of the culture which the islanders were then avidly adopting and adapting from the brilliant and powerful empire on the adjoining continent. In the past hundred years Christianity has made marked gains among Africans and Asiatics, in part because it comes as a constituent of the civilization which is reshaping these peoples. A

desire for the advantages, spiritual or material, which a religion seems to offer has repeatedly proved an important factor in the acceptance of a faith. Thus the widespread longing in the Greco-Roman world in the early Christian centuries for deliverance from mortal flesh with its sins and ills and the assurance of immortality through union with a divine being was no small factor in the phenomenal expansion of Christianity and in the rapid growth of the mystery cults of Mithras, Isis and Osiris, Orpheus, Dionysus and Attis.

Neither in Buddhism nor in Islam has missionary activity ever become so systematic and so elaborately organized as in Christianity. Nevertheless, Buddhism owes an incalculable debt to the professional missionary. From the time of his conversion to his death the founder of Buddhism was himself an indefatigable propagator of his teachings. His example inspired his followers. Buddhist monks, being celibates and freed from family obligations, had liberty to travel, and their community life favored the establishment of groups from which influences radiated to the surrounding neighborhood. Missionary monks from India and central Asia had a major share in the introduction of Buddhism to China. For centuries Chinese monks sought inspiration in India in the scenes of the origin of their faith and, returning to their native land, brought fresh life to their coreligionists. Buddhist missionaries from China and Korea aided in the propagation of their faith in Japan. Japanese, journeying to monasteries on the continent, returned with reenforced zeal and in more than one instance introduced a new Buddhist sect into their homeland. The dissemination of Islam too can be traced in several countries to avowed missionaries—more than is sometimes realized. Mohammed himself was an ardent missionary and the Koran contains directions for the spread of the faith. While the great Arab conquests in Asia, Africa and Europe made soon after the prophet's death were not primarily for the purpose of effecting conversion, incidentally they were followed by vast accessions. Repeatedly earnest missionaries have labored for the conversion of non-Moslems. Thus in the eighth century a movement arose in Persia which evolved a specific technique of propaganda and had emissaries not only there but in other lands, including India.

During the last four centuries, which have witnessed the development of Christian missions to a degree of organization hitherto unprece-

dented, the aggressiveness of Buddhism and Islam has been far less marked. Although during the modern period and particularly since the opening of the nineteenth century it has won some new territories and peoples, notably along trade routes in the center and on the east coast of Africa, Islam has not covered anything like the same amount of territory as has Christianity. Not for considerably more than two centuries have Buddhists given strong indication of an intention to extend their faith among hitherto untouched peoples. The most that can be said is that Japanese Buddhism has manifested considerable determination to hold its oversea emigrants and that slight attempts have been made to organize a world mission of Buddhism.

In the process of expansion which has made Christianity both numerically and territorially the most widely diffused religion on the globe, professional missionaries devoting the major portion of their time to the task have on the whole played a part of fundamental importance. This part was, however, comparatively modest in the first period of Christian expansion, covering roughly the first four centuries of the Christian era, during which Christianity rose from an apparently insignificant Jewish sect to a community virtually coterminous with the Roman Empire and embracing in addition the majority of inhabitants in the buffer state of Armenia as well as a considerable part of the population in Abyssinia, and scattered groups in Persia, Arabia, central Asia and possibly India. To the annals of professional missionaries belong such notable names of the first century as Peter and Paul; in the third century Gregory the Thaumaturgist was largely responsible for the conversion of Pontus; and in the third and fourth centuries Gregory the Illuminator was active in helping to complete the conversion of Armenia. But probably most of the ground was gained by laymen and laywomen primarily engaged in other occupations. The success of this mode of propagation must be laid in part to external circumstances, particularly the religious hunger of the masses and the degree of cultural and linguistic uniformity and of social and commercial intercourse prevailing in the Roman world. That Christianity eventually outstripped the competing religions and cults which mushroomed under these conditions was due to a combination of factors peculiar to the Christian faith and church (see RELIGIOUS INSTITUTIONS, CHRISTIAN, section 1), and to its final adoption by the Roman emperors.

In the second period of the spread of Christianity, from about the year 400 to the close of the fifteenth century, the professional missionary played a much more significant role than he apparently did in most of the first period. In winning to the Christian faith the barbarian invaders of the Roman Empire and the peoples of northern and central Europe—a process which was continuous during the period and was never fully accomplished—he had a major share. The vast majority of the missionaries were monks. Complete devotion to the religious life, celibacy with its freedom from family obligations, the vow of personal poverty and the typical organization of monasticism into communities to the heads of which each member had promised obedience contributed toward rendering monks not only effective advance representatives of the faith but agents as well for the slow and patient process of instructing newly won populations in Christian tenets and practices. Often their task involved clearing forests, cultivating land, conducting schools in secular as well as religious subjects and producing and copying literature. Monasteries were centers of civilization in rude and semibarbarous areas.

Even a simple catalogue of notable missionaries would prolong this article unduly. Special mention should be made, however, of Ulfilas (fourth century), who put the Scriptures into the Gothic language and won many of his fellow Goths. Patrick (*c.* 389–461), a Briton of Romanized and Christian stock, as a youth was carried captive to Ireland, escaped after some years and returned still later as a missionary. Christianity had arrived in Ireland before him, but he strengthened and extended it. After his death Irish monasteries became centers of missionary enthusiasm, and remained such until the ninth century, when they were devastated by invasions of the Northmen. Even then many of their members, forced to flee, aided learning and religion on the continent. Irish monks were missionaries in Scotland, which was visited particularly by members of the island monastery of Iona, founded by Columba in the sixth century; in England; in the Rhine valley; among the Franks; in Gaul; in what is now Switzerland; and in Italy. Familiar with Latin and in some cases even with Greek, they not only propagated the faith in pagan regions but endeavored to lift the level of education and morals among nominal Christians. In 597 the Roman Augustine, who with a company of fellow monks had been dispatched by Pope Gregory the Great, reached

England and not only helped to spread Christianity among the Germanic inhabitants but to tie up the Christian communities with the papacy. Willibrord (*c.* 657–738), a product of an Irish monastery, led the missionary work in Frisia, as did Boniface (Wynfrith) (680–755) in the Rhine valley; they were only two of the many English monks and nuns who taught their faith among the Germanic peoples on the continent. The monk Ansgar, born about 801 in the diocese of Amiens, was the principal early missionary to Denmark and Sweden. Two monks of the ninth century, Cyril and Methodius, were the chief missionaries in Moravia. In the eleventh century Benedictine monks, at the invitation of the king, Stephen, had a large share in the conversion of Hungary. Much of the propagation of the faith in Russia was likewise due to monks.

The work of the monks was aided or supplemented not only by lay pioneers, such as merchants, but by the papacy and the secular rulers. The papacy occasionally took the initiative and often gave supervision and direction. As a center of reference and authority Rome was to no small degree responsible for the processes and the results. Often, as in the case of Clovis among the Franks, Vladimir at Kiev, Stephen of Hungary and some of the Norwegian kings, the acceptance of Christianity by the monarch was in advance of that of the majority of his subjects and was followed by the mass conversion of his followers—either voluntary or induced by force. Frequently a ruler afforded financial and even armed support to missionaries, at least partly from the desire to extend his political power; thus in several regions Carolingian backing entered into the process of conversion.

The methods of conversion were in some cases persuasion, example and instruction and in others force. Many missionaries and leading churchmen raised their voices against the use of compulsion, and more than once the papacy opposed it. In a rough age in which rulers were generally soldiers the protests as a rule proved vain. In some regions, however, notably among the English and in Ireland, very little force was employed; and always it was preceded, accompanied or followed by the more peaceful labors of the monks and clergy. The usual course in the conversion of a people was first the acceptance of the faith by a few scattered individuals or small groups, then the baptism of the monarch or chiefs, followed by the rapid and superficial conversion of the majority of the people

and the slow and often very incomplete work of instruction.

Between the seventh and the sixteenth century Christianity suffered serious territorial reverses through the spread of Islam in the Near East, Mesopotamia, north Africa, the Iberian Peninsula, and southeastern Europe and through the Mongol irruption in the thirteenth century. Some of the territory lost to Islam it regained during the same period, chiefly through the crusades. While the religious motive formed only one of the impulses which gave rise to and maintained the crusades, and did not always or even often predominate, yet it was prominent, and the crusades helped in the establishment of Roman Catholic communities in the Near East. Moreover they opened the way for and were often accompanied by zealous missionary monks, and, in their later stages, by ardently missionary Franciscan and Dominican friars. Some of the friars made their way far beyond the outposts of the crusaders into central Asia and in the thirteenth and fourteenth centuries even into India and China. Here, however, the results proved scanty and ephemeral. In the Iberian Peninsula what was practically a long intermittent crusade slowly annihilated the Moslem political power and was accompanied by the reconversion of the area to Christianity. In the sixth century Christianity spread southward, at first chiefly through the agency of missionaries from the Roman Empire to Nubia. For eight or nine centuries the Nestorian and to a lesser extent the Jacobite churches conducted extensive missionary operations in Asia. As a result of that effort, in Persia, central Asia, India and China Christian communities arose, some of them of considerable size, and endured for centuries. However, the latter part of the fourteenth and the fifteenth century witnessed their rapid decline and the complete disappearance of all but a few remnants in Mesopotamia, Persia and south India.

The third period of expansion, running from the close of the fifteenth century to the beginning of the nineteenth, is associated with the discoveries and conquests by European peoples, predominantly Roman Catholic, and the commerce conducted by them. In most of the exploration and conquest, particularly of the Portuguese and Spaniards, the conversion of non-Christians was put forward as a leading objective. A great proportion of the expeditions included members of the clergy, who went partly to minister to the Europeans but also as missionaries

to the natives. Many projects, exclusively missionary in purpose and personnel, were undertaken. The great majority of the missionaries belonged to the religious orders, notably the Dominicans, Franciscans, Augustinians and the recently organized Society of Jesus. Francis Xavier (1506-52), a member of the original group which constituted the Jesuit order, pioneered in India and the Far East and was one of the most noteworthy missionaries in the history of the church. The Société des Missions Étrangères of Paris, an association of secular clergy founded in the seventeenth century, was prominent in French missions in India, Siam, Indo-China and China.

The Holy See claimed the right not only to direct the work of conversion among non-Christians, but to assign to Christian princes both the responsibility for conducting missions and the temporal authority over pagans. Accordingly ecclesiastical and temporal jurisdiction over the newly discovered lands was divided between Spain and Portugal. The Spanish and Portuguese monarchs financed, directed and supervised missions and missionaries. They controlled the ecclesiastical establishments within their respective colonial territories and, to a certain extent, outside the lands immediately under their political direction. Conflicts over this right of patronage in territories not under the political administration of Spain or Portugal arose with non-Spanish and non-Portuguese missionaries who declined to submit to it and also with the Congregatio de Propaganda Fide, organized by the papacy in 1622 to direct the work of evangelization in non-Catholic and pagan countries. The conflict waxed more acute when, with its decline, Portugal proved less able to staff adequately the missions in the vast areas over which it claimed ecclesiastical jurisdiction through the *Padroado*. French missionaries especially were inclined to ignore Portuguese claims, particularly as in time they became active not only in French colonial possessions but in such independent countries as China.

In this period Roman Catholic missions covered an enormous territory. They were coextensive with Spanish and Portuguese settlements in the New World, with the Portuguese and French possessions in India and the East and with the regions actually occupied by the Spaniards in the Philippines. They were to be found in China, for several decades in Japan, in large portions of India outside Portuguese or French jurisdiction, in Tibet, in the Near East, in

several places along the coast of Africa, for a time in Abyssinia and over much of the portion of North America within the French sphere of influence. Moreover Roman Catholic missionaries, especially the Jesuits, were trying to win Protestants back to Rome and so were often numerous in Protestant lands.

In the Spanish Americas, after the first wave of exploration and conquest had spent itself, missionaries formed the advance agents of Spanish civilization and political authority. Particularly in the territory which is now Texas, New Mexico, Arizona and California, priests supported by small military contingents sought to induce the Indians to settle around the mission station and to teach them not only the rudiments of Christianity but agriculture and simple industries. In French America missionaries were among the most distinguished explorers, pioneers of white supremacy, but were not on the whole so immediately successful in the work of conversion as were the Spaniards—a difference due not to lack of zeal but to the character of the Indians among whom they labored. The missionaries, particularly those in Spanish America, the West Indies and the Philippines, proved the most active advocates of the natives against the rapacity and cruelty of the conquerors, although some of the clergy sided with the colonists. It was missionaries who in the Americas boldly denounced the conquistadores for their barbarities and who insistently presented the cause of the aborigines to the authorities in Spain. Bartolomé de las Casas (1474-1566) was probably the most prominent of such missionaries, but he was only one of many. To them were largely due the humane regulations of the Spanish crown—all too frequently disregarded under the stress of conquest and the pressure for laborers for mines and fields—which sought to protect, convert and educate the natives. In Paraguay for about a hundred and fifty years in the seventeenth and eighteenth centuries the Jesuits exercised a benevolent paternalistic control over the Indians, most of the time without interference from the Spanish or Portuguese civil or military authorities. Missionaries introduced new plants and fruits, established schools, compiled grammars and dictionaries of native tongues, wrote works on the cultures and customs of many of the peoples among whom they served and translated western books into American and Asiatic languages and some of the classics of non-European peoples into European tongues.

The results of these extensive labors were

noteworthy. Not only did missionaries assist in the process of European penetration and conquest and prove the most prominent agents in tempering the harshness of that impact, but they won large populations to the Christian faith. Within the territories over which Spanish and Portuguese political control was effective, mass conversions were the rule and the bulk of the native population in time professed the faith of their masters. In regions to which that control did not extend or where it was not well established converts were more scattered. For instance, in India outside the boundaries of the limited Portuguese posts converts seldom formed more than an infinitesimal proportion of the population; and in China, in spite of the favor which missionaries won at court by their service as scholars, Christians never numbered as much as 1 percent of the population and were periodically persecuted because they seemed to threaten the existing social and political order. For a time in the sixteenth century Christianity made rapid headway in Japan, partly because some of the local lords hoped by supporting it to win a share in the lucrative Portuguese and Spanish commerce. Later it was all but completely stamped out because it was believed subversive to the political unity and independence of the realm.

Not much adaptation of this imported Roman Catholic Christianity was consciously made to the customs of the preceding cultures, although some modifications inevitably crept in, as evidenced by the survival of many animistic beliefs and a tendency on the part of the natives to identify their old gods with the Virgin and the saints. In India and China outside the area of possible European political conquest, where the one hope of winning the majority to the faith seemed to lie in antagonizing the native cultures as little as possible, some of the Jesuits made interesting attempts to tolerate in the Christian community indigenous institutions and practices, such as caste and the cult of ancestors. After prolonged controversy, however, these experiments were in large part condemned by Rome. In the Americas, so far as possible, a clean sweep was made of the pagan cults. Latin remained the liturgical language. Some efforts were put forth to train a native clergy, but bishoprics and archbishoprics were limited almost exclusively to those of European blood. In the religious orders, which continued more powerful than the secular clergy, those of European stock predominated. European imperialism

was as persistent in the church as in the state.

When during the closing decades of the eighteenth century the religious indifference and anticlericalism of the Enlightenment, aggravating the setback to Catholic expansion involved in the decay of Spain and Portugal, brought about the decline or virtual suspension of missionary activity until after the disruptive effects of the French Revolution and the Napoleonic wars, the predominance of the Roman church in the missionary field had as yet received little challenge from either Protestants or Greek Catholics. A fundamental reason for this was that Roman Catholic peoples were the most active explorers and colonizers of the period prior to 1800 and were more extensively in touch with non-Christians than were either Protestants or the Eastern churches. But there were supplementary reasons. With the exception of the church of Russia, the Eastern churches were on the defensive against Islam; the Russians, exempt from this menace, had in fact disseminated the Christian faith as they moved across Siberia and into Alaska, while the state church had devoted some attention to the conversion of the non-Christian Tartars within the Russian Empire. The Protestants had been too preoccupied with controversies with the old church and with each other, with the formulation of their beliefs and with the problem of effecting an organization to give much time or thought to non-Christian peoples. Many of the outstanding leaders of early Protestantism, absorbed in furthering their form of the faith within Europe, were indifferent to foreign missions. With the entry of such Protestant powers as the Netherlands, England, Sweden and Denmark into the field of colonization in the seventeenth century certain religious leaders urged the states to provide for the Christian education of natives within their colonies. The pressure was sufficient to induce the Dutch to maintain official missions in the East Indies and Ceylon and, during their brief occupation, in Formosa. But in general the Protestant governments manifested little tendency to assume the responsibility. Such missions as were carried on in English territories operated almost entirely without governmental assistance; the agent of British power in India and the Far East, the English East India Company, long refused either to tolerate missionaries within its territories or to give them passage on its ships, on the ground that missionaries would jeopardize harmonious relations between the company and the natives. The only ardent or

permanent missionary zeal displayed by the English prior to the changes which prepared the fourth and final phase of Christian expansion made its appearance in the English colonies of North America, where several religious bodies conducted missions among the Indians.

On the Protestant side the impulse for the great missionary movement of the nineteenth and twentieth centuries, during which the Christian faith attained its widest geographical extension, may be traced to the "evangelical awakening" of the eighteenth century in Great Britain and to the continued quickening of religious life in Protestant circles in North America, Great Britain and the continent of Europe. In its inception the new religious life in Great Britain owed much to German Pietism, the product of a revival of the late seventeenth and the early eighteenth century. An evangelical sect projected into the alien climate of the Enlightenment, the Pietists had found an outlet for their proselyting zeal during the eighteenth century in foreign missions. Among these were a Danish project in Greenland; a mission in south India under Danish auspices but manned chiefly by Germans from the Pietist center, the University of Halle; and the many, widely scattered missions of the Moravian Brethren begun under the direction of the Pietist Count Zinzendorf in such regions as south Africa, the Danish West Indies, Surinam, Greenland and Labrador and among the Indians in the English colonies in North America. It was, however, the British and the Americans who initiated the period of the efflorescence of Protestant missions and who have continued to supply an overwhelming preponderance of their personnel and support. Not only was the "evangelical awakening" immediately responsible for the rise of missions in these countries, but a great part of the missionary movement on the continent was due directly or indirectly to repercussions from the quickening in the Anglo-Saxon churches.

The first major foreign missionary organization resulting from the new religious movements was the Baptist Missionary Society, founded in England in 1792, whose chief creator and first missionary was William Carey. This was soon followed in Great Britain by the London Missionary Society (1795), the Church Missionary Society (1799), the British and Foreign Bible Society (1804); in the United States by the American Board of Commissioners for Foreign Missions (1810); and, eventually, by many scores of societies in Great Britain, North America and

Europe. In America home mission societies followed the whites as the frontier moved westward, and cared for the Indian and the Negro. Beginning with 1886 the Student Volunteer Movement for Foreign Missions, which originated in the United States although it was paralleled in some other lands, did much to recruit for the missionary staffs. Normally, in the United States and Canada and in many instances in Great Britain, each Protestant denomination has its missionary society or societies to which it gives official support. On the continent, however, the sanction of an entire communion has less frequently been given a single society, and it is usual to have several different associations within a particular communion. A few bodies, notably the China Inland Mission (1865), draw their funds and their personnel from several denominations and even from more than one country. Each of the leading societies has developed machinery for educating its constituency in the giving of life and money. Careful tests have been devised for selecting missionaries, so that the average caliber of the personnel is often quite high.

Down through the nineteenth century and even until after the World War of 1914-18 the Protestant missionary movement expanded continuously in financial resources, in personnel and in the size of the constituencies resulting from it in the lands in which it labored. Its organization by denominations led to the perpetuation of sectarian divisions on the new geographic frontiers of Protestant Christianity. It developed, however, especially in the twentieth century, machinery for interdenominational consultation and action. Chiefly since 1910 there have come into existence, in lands to or from which missionaries are sent, thirty-seven national and regional bodies, in which the majority of the denominational organizations cooperate. Twenty-six of these national and regional bodies in turn are represented on the International Missionary Council, an outgrowth of processes set in motion at the World Missionary Conference held at Edinburgh in 1910.

In the Roman church the missionary revival which paralleled the Protestant movement resulted from the strengthening of Catholicism accompanying the Restoration and the age of Metternich. Many new missionary orders and congregations have come into existence, among them the White Fathers (1868), the Society of the Divine Word (1875) and the Congregation of the Immaculate Heart of Mary (1863); inter-

national associations, notably the Society for the Propagation of the Faith (1822), were created for the collection of money for missions. During the nineteenth century the Catholic missionary movement was predominantly French in personnel and support. In many regions the French government exercised a protectorate over Catholic missions and in some places, particularly in the Near East, China, Indo-China and the South Seas, found in them a screen for imperialistic political aggression. Yet no such extensive financial support was given them by governments nor was any such thoroughgoing control exercised by the French state over ecclesiastical machinery as was the case in the Spanish and Portuguese missions of the preceding period. With the anticlerical legislation and the separation of church and state in France at the close of the nineteenth and in the early part of the twentieth century, and with a quickening of missionary interest in other lands, French predominance declined.

The Russian Orthodox church confined its activities almost entirely to the Russian possessions, although it did institute a strong mission in Japan; after the revolution of 1917 it attempted to follow the émigrés. Several of the Eastern churches moreover sought with some success to extend their activities to America to cover the emigrants from their constituencies. It must be remembered, however, that through the antireligious policy of the Communist party in Soviet Russia Christianity has suffered its most marked territorial reverse since the rise of Islam.

In the nineteenth and twentieth centuries as in the earlier centuries of the modern era Christian missions have been intimately associated with the new economic movements in the Occident and with the expansion of European peoples. It is from lands and sections which have gained most in wealth and population from the new industrial processes that the major portion of the support for missionary societies in men and money has been derived; it is in regions penetrated by the expanding European peoples that missions have been chiefly conducted. Sometimes, as in David Livingstone's travels in Africa, missionaries have been the first to blaze the way for the European invasion. More frequently they have followed the first explorers. In practically every non-European land, however, missions have constituted an important part of the impact of European peoples and have modified the resulting cultural revolution.

The type of Christianity prevailing in any region has tended to reflect that of the western nation which is there dominant. Thus as a rule in Africa Protestant missions are strongest in the British possessions, while the Roman Catholic are dominant in French, Belgian and Portuguese territories. Practically no Protestantism is to be found in French Indo-China. In the Dutch East Indies Protestantism is more fully represented than Roman Catholicism, although the latter has tended, with the increasing strength of Catholicism in the Netherlands, to have a growing place. In British India Protestantism is more powerful than Catholicism. American Protestant missions, although prominent in India, the Near East and parts of Africa and dominant in Burma—regions where American political control is non-existent and American commercial interests are comparatively negligible—are especially active in China, Korea and Japan, in which American commercial interests have traditionally been strong; in the Philippines since the American occupation; among the Indians of the United States; and in Latin America. The World War tended to drive German missions out of British territory and out of German colonies as these passed into allied hands. During recent years, however, German missions have been restored to many of their old fields.

Although closely connected in a broad way with the process of European penetration, the missionary movement has been more dissociated from governments during the nineteenth and twentieth centuries than at any time since the conversion of Constantine. On the whole this has been even more generally true of Protestant missions than of Roman Catholic. Often, however, some connection has existed, and not infrequently governments and missions have reenforced each other. In China toleration of Christian missionaries and their converts was written into the treaties of 1858 with the major western powers. Mission schools have often been granted financial assistance by western and colonial governments—although this has not been on the ground that they are Christian and are making converts, but because they are schools. Many influential colonial officials have as individuals given support to missions. Sometimes, as in Uganda, the missionary forces have been active in obtaining the extension of the political authority of their government over the region in which they are at work. Not infrequently, however, European and American governments or their representatives have been

lukewarm and even hostile to missionaries. In very few regions have they provided financial backing for directly proselyting activities. They have not regarded the task of conversion as an integral part of their obligation to subject peoples, as did the Spanish and Portuguese governments in the preceding period. Deriving its extensive funds chiefly from the gifts of private individuals and exempt from the control that accompanies governmental assistance, the missionary movement has probably become more nearly a purely religious undertaking than heretofore.

Nevertheless, the attitude of the natives toward Christian missions has been profoundly conditioned by the close connection of the latter with the expansion of European peoples and cultures. In many instances converts have been moved to accept the faith by the hope of the assistance of the powerful white man or by the belief that Christianity is indissociable from that western civilization which they are eager to adopt and that it will bring them the political power and wealth which they envy in the Occident. Conversely, opposition to missions has often been actuated by a fear that they are agents of western imperialism. Thus the violent persecutions of Christianity in Korea and Indo-China in the first half of the nineteenth century seem to have sprung largely from this source. In more recent years, with the rise of nationalism in the East, leaders of anti-Christian and antimissionary movements, for instance in China and Turkey, have given as reasons for their attitudes not only the association of Christian missionaries with western imperialism but the denationalization of converts and the destruction of national cultures by western Christianity. Some opponents of missionaries, it must be added, are motivated also by the religious skepticism which often results from contact with the Occident and oppose not only Christianity but all religion on the ground that it is superstitious and unscientific.

The methods employed by missions in the nineteenth and twentieth centuries have in some respects resembled those of preceding periods, particularly in the case of Roman Catholic missions. The latter still make it their primary objective to gather as many individuals as possible into the church, there to insure, through instruction and the ministrations of the clergy, their regeneration in this life and their salvation in the world to come. The conversion of an entire village is preferred to that of isolated

individuals, and the effort is often made to win the chiefs of a primitive tribe and through them the masses. Many Protestants moreover have believed it wise strategy to seek adherents from the dominant classes or to train leaders, and have sought to do so largely through schools. Mass conversion to Protestantism has occurred, although usually it has been confined to primitive peoples, such as those in the Pacific islands, and to outcaste groups in India. Mixed motives have often operated, as in earlier centuries, to produce conversions both to Protestant and to Roman Catholic Christianity. So among the outcastes of India the desire to improve their social and economic status has been an important factor; in China the protection given to Christians under the treaties has motivated some conversions, and probably in all lands the economic assistance afforded by missionaries has been a powerful attraction.

Yet in many ways the methods and objectives of Christian missions in the nineteenth and twentieth centuries have differed markedly from those of previous ages. This shift has accompanied the increased independence of missions from secular control and is related particularly to certain emphases and values closely associated with Protestantism. The traditional stress of Protestantism upon individual conversion has been accentuated in Protestant missions because most of the support for missions has tended to come from those groups which have magnified conversion as an experience involving the emotions, the intellect and the will and accompanied and followed by moral changes. Narrowly linked with this is the humanitarianism which among the Anglo-Saxon peoples has been so closely intertwined with, and so largely the product of, the religious awakening of the eighteenth and nineteenth centuries. As a consequence Protestant missionaries not only have sought the spiritual and moral transformation of the individual by religious processes and have endeavored to build up Christian communities which would be characterized by what they considered a Christian type of life, but they have labored to relieve suffering, to remove ignorance and to attack whatever seemed to them to be socially unjust and evil. As they have watched the native cultures change and in many cases disintegrate under the impact of western civilization, they have striven to build Christian ideals and practices into the civilizations in the hope of replacing the loss. The relative emphasis upon the "individual" and the "social" aspects of the

missionary program has varied from group to group; but while extremists on either wing have, with resulting tension, tended to denounce the others, all groups have in practice given attention to both aspects. The Protestant belief in the Bible as the authoritative basis of faith and practice and the insistence that each Christian read it for himself have brought about the reduction of many scores of languages to writing, the translation of part or all of the Bible into hundreds of tongues and the organization and maintenance of thousands of elementary schools for the non-Christian as well as the Christian constituency. Education, much of it in secular subjects and in some countries stressing secondary and higher institutions, has become one of the major features—in several regions the major feature—of missionary activity. The humanitarian motive has led also to extensive medical work. In China the modern medical profession is almost entirely the creation of the Protestant missionary and in India and Africa he has held an important place in medical relief. Schools for the blind, leper asylums, famine relief, public health education, western forms of athletics, agricultural improvement, action against slavery, the abolition of the opium traffic, the improvement of relations between races and nations, greater freedom and education for women and girls, have all been among the projects of Protestant missionaries. Similar tendencies have become manifest also in Roman Catholic missions. More than formerly the latter have emphasized the orphanage, where destitute children can be both cared for and reared in the Christian faith. Much effort and money have been devoted by Roman Catholics to the maintenance of schools and hospitals, printing presses and newspapers, although these labors are still considerably less extensive than among the Protestants.

In results as in methods the missions of the nineteenth and twentieth centuries are somewhat in contrast with those of preceding epochs. During this period no large nation has moved into the Christian church. Here and there the majority or considerable sections of a tribe or of the population of an island have been won to the Christian faith. In India, where the Protestant membership is predominantly of outcaste origin, a large proportion of a depressed group has often professed conversion at about the same time. But in none of the major areas in which missions are conducted, with the exception of the South Seas, do Christians form even a substantial minority of the population. In Japan and

China they constitute less than 1 percent, in India only slightly over 1 percent, and in Negro Africa probably about 2 percent of the whole. The apparent meagerness of statistical results has been due to a variety of factors, among them the resistance to a new faith by highly organized cultures, as in India, China and Japan, and the emphasis of nineteenth century missionaries upon individual rather than mass conversion and upon a relatively high degree of religious instruction for Christians. In each of these areas, however, the increase of the Christian groups has been and continues to be proportionately more rapid than the rate of growth of the total population. Emphasis is more and more being placed, especially with the recent rise of nationalism in non-occidental lands, upon the training of native leadership, independence of foreign financial assistance and, in Protestant groups, upon freedom from alien ecclesiastical control. The process of "indigenization" is slower in liturgy, ecclesiastical architecture and forms of church government. In some Protestant circles a growing tolerance toward non-Christian faiths is apparent. There have been many advocates of the idea that missionaries should not merely teach but learn from other faiths. Here and there indeed, as in some near eastern Christian colleges, proselyting is deliberately eschewed and the attempt is made rather to strengthen existing religious groups by permeating them with a certain amount of Christian idealism. Particular attention has recently been focused upon some of these issues by the publicity accorded to *Re-thinking Missions* (New York 1932), a volume issued by the Protestant Laymen's Foreign Missions Inquiry.

Home missions have operated with particular success in North America. Following the white population on its westward migration in the United States and Canada or in its settlement in the eastern cities, missionaries have held to the faith of their forefathers most of the professedly Christian emigrants to the United States, Canada and South America. Moreover about half the Negroes of the United States are members of Protestant churches, most of the growth being the result of missions by whites and by Negroes since their emancipation.

The influence of missions, and especially of Protestant missions, has by no means been confined to the creation of Christian groups. Often it has profoundly affected an entire tribe or nation. Missions have shared in the corrosive effect of European civilization upon non-Euro-

pean cultures, sometimes, as in the case of the Taiping rebellion in China in the middle of the nineteenth century, with spectacular results. In many instances, however, especially in late years, missionaries have sought to conserve what they have deemed the better elements of the old. All along they have attempted to guard non-European peoples against ruthless exploitation by westerners. It is significant that the Chinese of the twentieth century who has had the most profound influence over his fellow countrymen, Sun Yat-sen, received most of his formal education at the hands of Protestant missionaries and that the two most influential Indians, Gandhi and Rabindranath Tagore, while not professing Christians, are both in part the products of Christianity. New sects showing Christian influence have arisen, at least one of them, the Ārya Samāj, by way of reaction and with a strong anti-Christian bias. Hinduism has been modified by its contacts with Christianity, and Japanese Buddhism has borrowed many of its methods and some of its concepts from Christianity. Through mission schools as well as through other channels Christianity is influencing many of the customs and ethical standards of non-European non-Christian peoples. It is assisting and in places initiating the emergence of women into a new status.

The example of Christian missions has in sporadic instances stimulated a counteroffensive on the part of oriental religions. On occasion missions have been sent to America and western Europe by Moslems, Buddhists, Hindus and Theosophists, but in general they have met with only limited success. In the realm of religion the Occident shows the influence of its contact with the Orient chiefly in its growing tolerance for non-Christian faiths and in its modification of the claim that Christianity may rightly be regarded as the only true religion. Even in church circles, particularly in American Protestantism, Christianity is frequently conceived as merely one of the paths to religious reality.

In certain spheres and periods Christian missions have exerted considerable effect upon the culture of the peoples from whom they have sprung. Missionaries have made notable contributions to European and American knowledge of the geography, history, language, literature, customs and religion of the peoples to whom they have gone. The Jesuit missionaries of the early modern period amassed in *Lettres édifiantes* and other compilations stores of information which have been of great importance for scien-

tific research in anthropology and ethnology. Some outstanding anthropologists, for example, R. H. Codrington, have been Protestant missionaries. Often missionaries have portrayed in so favorable a light the peoples to whom they have ministered that they have awakened admiration of or sympathy for them. Thus the enthusiasm for China in Europe in the eighteenth century was based upon information provided by Roman Catholic missionaries; the *bon sauvage* as apotheosized by Rousseau was, no less than the *sage chinois*, a concept abstracted from the writings of foreign travelers, particularly of Jesuit missionaries. The friendliness of the United States toward China during much of the nineteenth and twentieth centuries has probably been due in part to missionaries.

At present Christian missions manifest changing trends. Roman Catholic missionaries have been increasing, thanks partly to the active support of recent popes, especially Pius XI, and partly to a missionary awakening among American Catholics. Official figures for 1927 give the total number of Roman Catholic foreign missionaries as about 25,000, of whom about 8000 are priests and about 14,000 sisters. Affiliated with the Congregatio de Propaganda Fide there were at that time 5 universities with 1107 students and 31,413 other schools educating 1,520,603 pupils. Hospitals numbered 692, dispensaries 1857, orphanages 1528, leper asylums 81 and homes for the aged 299. Within the past two decades Protestant missions have been dealt some heavy blows. The incomes of British societies have shown no very great increase since the World War; the German societies have not fully recovered from the reverses suffered during the war and its aftermath; and the incomes of American societies, after an initial phenomenal growth in the years immediately succeeding the war, began to decline about 1925, for reasons not yet entirely clear. Between 1928 and 1930 the total expenditures of the societies connected with the International Missionary Council, in which a number of boards are not included, averaged \$51,273,695 a year; of this amount approximately three fifths came from North America and slightly more than one fifth from Great Britain. The most recent reliable figures for the entire enterprise, representing conditions at the end of 1922 and early in 1923, show a total Protestant foreign missionary staff of 29,188, of whom 7625 were ordained men, 3819 unordained men, 8619 wives and 9125 unmarried women and widows. Since that date the number

has probably declined somewhat. There were, according to the same statistical source, 101 colleges and universities with 22,827 students; in addition there were 49,426 other schools, in which 2,403,959 pupils were enrolled. Protestant missions were supporting 858 hospitals, 1686 dispensaries, 361 orphanages, 104 leper asylums and 32 institutions for the blind and deaf. So far as figures are available, they indicate the continued growth of the churches established by the missions, both Roman Catholic and Protestant, although in China the rate of increase has slowed down, especially since the disturbances of 1925.

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See: PROSELYTISM; CONVERSION, RELIGIOUS; RELIGION; RELIGIOUS INSTITUTIONS; CHRISTIANITY; BUDDHISM; ISLAM; SECTS; DOMINICAN FRIARS; JESUITS; FRANCISCAN MOVEMENT; MONASTICISM; REVIVALS, RELIGIOUS; BACKWARD COUNTRIES; EUROPEANIZATION; IMPERIALISM; COLONIES; NATIVE POLICY; EXTERRITORIALITY; FRONTIER; HUMANITARIANISM; CONQUEST.

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MITCHELL, JOHN (1870-1919), American labor leader. Mitchell was the son of a miner of Irish Scotch ancestry. Left an orphan at an early age, he began work at nine, entered the mines of Illinois the following year and at fifteen joined the Knights of Labor. In the later 1880's he joined the westward trek, returning to Illinois in time to participate in the bloody struggle of 1889 and to join the newly organized United Mine Workers. This union exercised no real power until the national soft coal strike of 1897, which ushered in the first significant nation wide collective agreement. As leader of the difficult southern Illinois sector of the struggle Mitchell gained election to the national vice presidency in 1898 and shortly thereafter became acting president when his predecessor was appointed to governmental office. In 1899 he was elected to the presidency and was reelected until 1908, when he resigned because of ill health. From 1908 to 1911 he was chairman of the Trade Agreement Department of the National Civic Federation, resigning when the miners' union forbade membership in that body. At the time he was under indictment for violation of the injunction in the Buck Stove and Range case. After some years of free lance lecturing on labor problems he was appointed commissioner of labor of New York state in 1914 and later became chairman of its Industrial Commission, serving in that office until his death. Within the American Federation of Labor he served from 1899 to 1900 as fourth vice president and

from 1900 until 1914 as second vice president.

In his time Mitchell was second in importance only to Gompers, and he was proposed more than once as his successor. The coal miners' union, which grew from 40,000 to almost 300,000, formed the bulwark of the American Federation of Labor, still struggling to establish itself. Mitchell fought narrow craft tendencies within his organization and succeeded in wresting from the Scranton convention of the American Federation of Labor in 1901 the right to organize on the basis of industrial unionism. The miners represented the most highly organized of any American industry, and the proportionate and absolute gains in wages and working conditions in the soft coal region were well above the average. At a time when labor leaders fought the machine Mitchell's union accepted its introduction and instituted means for safeguarding the worker against its encroachment on his pay and his security.

The outstanding advocate of "prudent business methods" and the "sacredness of contract," Mitchell won his widest fame as leader of the five-month strike of the anthracite coal workers. This strike not only resulted in the organization of the 150,000 workers, the majority of whom were immigrants, hitherto split on racial and national lines, divided by craft and sectional jealousies, which often resulted in disastrous sectional strikes, but also represented the first successful encounter with monopolistic industry. The manner in which Mitchell conducted the strike won him the sympathy of a public hitherto antagonistic to unionism and brought to his aid the outstanding radicals and liberals of the time, who hailed him as a new type of labor leader.

Mitchell began as a Populist and a believer in independent political action by labor. Although he was a Democratic appointee and was once mentioned as a running partner for Bryan he never shared the antagonism toward socialists common to his associates in the Federation of Labor. By the strong socialist sector in his union he was much criticized for such matters as the submission to arbitration of the 1902 anthracite strike, his failure to organize West Virginia, the reduction taken by the soft coal miners in 1904, the sectional settlements after the national soft coal strike of 1906, his failure to push aggressively for a universal system of industrial unionism within the American Federation of Labor and his advocacy of the policy of "sacredness of contract." His fame among the miners as a

tific research in anthropology and ethnology. Some outstanding anthropologists, for example, R. H. Codrington, have been Protestant missionaries. Often missionaries have portrayed in so favorable a light the peoples to whom they have ministered that they have awakened admiration of or sympathy for them. Thus the enthusiasm for China in Europe in the eighteenth century was based upon information provided by Roman Catholic missionaries; the *bon sauvage* as apotheosized by Rousseau was, no less than the *sage chinois*, a concept abstracted from the writings of foreign travelers, particularly of Jesuit missionaries. The friendliness of the United States toward China during much of the nineteenth and twentieth centuries has probably been due in part to missionaries.

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has probably declined somewhat. There were, according to the same statistical source, 101 colleges and universities with 22,827 students; in addition there were 49,426 other schools, in which 2,403,959 pupils were enrolled. Protestant missions were supporting 858 hospitals, 1686 dispensaries, 361 orphanages, 104 leper asylums and 32 institutions for the blind and deaf. So far as figures are available, they indicate the continued growth of the churches established by the missions, both Roman Catholic and Protestant, although in China the rate of increase has slowed down, especially since the disturbances of 1925.

K. S. LATOURETTE

See: PROSELYTISM; CONVERSION, RELIGIOUS; RELIGION; RELIGIOUS INSTITUTIONS; CHRISTIANITY; BUDHISM; ISLAM; SECTS; DOMINICAN FRIARS; JESUITS; FRANCISCAN MOVEMENT; MONASTICISM; REVIVALS, RELIGIOUS; BACKWARD COUNTRIES; EUROPEANIZATION; IMPERIALISM; COLONIES; NATIVE POLICY; EXTERMINATION; FRONTIER; HUMANITARIANISM; CONQUEST.

Consult: Arnold, T. W., *The Preaching of Islam* (2nd ed. London 1913); Eliot, Charles, *Hinduism and Buddhism, an Historical Sketch*, 3 vols. (London 1921), especially vol. iii; Moore, G. F., *Judaism in the First Three Centuries of the Christian Era*, 3 vols. (Cambridge, Mass. 1927-30) vol. i, p. 323-53; Clemen, C., "Missionstätigkeit der nichtchristlichen Religionen" in *Zeitschrift für Missionskunde und Religionswissenschaft*, vol. xlv (1929) 225-43; Harnack, A. von, *Die Mission und Ausbreitung des Christentum in den ersten drei Jahrhunderten*, 2 vols. (4th ed. Leipsic 1923), tr. and ed. by James Moffatt (2nd ed. London 1908); Robinson, C. H., *The Conversion of Europe* (London 1917); Schmidlin, J., *Katholische Missionsgeschichte* (Kaldenkirchen 1925), and *Katholische Missionslehre im Grundriss* (2nd ed. Münster 1923), tr. as *Catholic Mission Theory* (Techny, Ill. 1932); Goyau, G., *Missions et missionnaires* (Paris 1931); Warneck, G., *Abriss einer Geschichte der protestantischen Missionen von der Reformation bis auf die Gegenwart* (10th ed. Berlin 1913), tr. by George Robson from the 8th edition (Edinburgh 1906); Frick, Heinrich, *Die evangelische Mission* (Bonn 1922); Cary, Otis, *A History of Christianity in Japan*, 2 vols. (New York 1909); Paik, L. G., *The History of Protestant Missions in Korea, 1832-1910* (Pingyang 1929); Latourette, K. S., *A History of Christian Missions in China* (New York 1929); Richter, Julius, *Die evangelische Mission in Niederländisch-Indien*, *Allgemeine evangelische Missionsgeschichte*, vol. v (Gütersloh 1931), *Indische Missionsgeschichte*, *Allgemeine evangelische Missionsgeschichte*, vol. i (2nd ed. Gütersloh 1924), tr. by S. H. Moore (Edinburgh 1908), *Mission und Evangelisation im Orient*, *Allgemeine evangelische Missionsgeschichte*, vol. ii (2nd ed. Gütersloh 1930), and *Geschichte der evangelischen Mission in Afrika*, *Allgemeine evangelische Missionsgeschichte*, vol. iii (Gütersloh 1922); Rein, Adolf, *Die europäische Ausbreitung über die Erde* (Potsdam 1931); Bolton, H. E., "The Mission as a Frontier Institution in the Spanish-American Colonies" in *American Historical Review*, vol. xxiii (1917-

18) 42-61; Martin, K. L. P., *Missionaries and Annexation in the Pacific* (Oxford 1924).

For recent movements in Protestant missions: International Missionary Council, *Report of the Jerusalem Meeting, March 24-April 8, 1928*, 8 vols. (New York 1928); Laymen's Foreign Missions Inquiry, *Rethinking Missions, a Laymen's Inquiry after One Hundred Years* (New York 1932); *World Missionary Atlas*, ed. by H. P. Beach and C. H. Fahs (New York 1925). For recent movements in Roman Catholic missions: *Année missionnaire, 1931*, ed. by P. Lesourd (Paris 1931); *Missiones catholicae cura s. congregationis de propaganda fide* (Rome 1930); Streit, K., *Atlas hierarchicus* (2nd ed. Paderborn 1929), English translation (New York 1929). The most scholarly periodicals to be consulted for Roman Catholicism, *Zeitschrift für Missionswissenschaft*, published quarterly in Münster since 1911, and *Revue d'histoire des missions*, published quarterly in Paris since 1924; and, for Protestantism, *International Review of Missions*, published quarterly in London since 1912, containing also bibliographies of current literature. The best bibliography of literature on Roman Catholic missions is, *Bibliotheca missionum*, compiled by R. Streit and J. Dindinger, vols. i-vii (Münster and Aachen 1916-31).

MITCHELL, JOHN (1870-1919), American labor leader. Mitchell was the son of a miner of Irish Scotch ancestry. Left an orphan at an early age, he began work at nine, entered the mines of Illinois the following year and at fifteen joined the Knights of Labor. In the later 1880's he joined the westward trek, returning to Illinois in time to participate in the bloody struggle of 1889 and to join the newly organized United Mine Workers. This union exercised no real power until the national soft coal strike of 1897, which ushered in the first significant nation wide collective agreement. As leader of the difficult southern Illinois sector of the struggle Mitchell gained election to the national vice presidency in 1898 and shortly thereafter became acting president when his predecessor was appointed to governmental office. In 1899 he was elected to the presidency and was reelected until 1908, when he resigned because of ill health. From 1908 to 1911 he was chairman of the Trade Agreement Department of the National Civic Federation, resigning when the miners' union forbade membership in that body. At the time he was under indictment for violation of the injunction in the Buck Stove and Range case. After some years of free lance lecturing on labor problems he was appointed commissioner of labor of New York state in 1914 and later became chairman of its Industrial Commission, serving in that office until his death. Within the American Federation of Labor he served from 1899 to 1900 as fourth vice president and

from 1900 until 1914 as second vice president.

In his time Mitchell was second in importance only to Gompers, and he was proposed more than once as his successor. The coal miners' union, which grew from 40,000 to almost 300,000, formed the bulwark of the American Federation of Labor, still struggling to establish itself. Mitchell fought narrow craft tendencies within his organization and succeeded in wresting from the Scranton convention of the American Federation of Labor in 1901 the right to organize on the basis of industrial unionism. The miners represented the most highly organized of any American industry, and the proportionate and absolute gains in wages and working conditions in the soft coal region were well above the average. At a time when labor leaders fought the machine Mitchell's union accepted its introduction and instituted means for safeguarding the worker against its encroachment on his pay and his security.

The outstanding advocate of "prudent business methods" and the "sacredness of contract," Mitchell won his widest fame as leader of the five-month strike of the anthracite coal workers. This strike not only resulted in the organization of the 150,000 workers, the majority of whom were immigrants, hitherto split on racial and national lines, divided by craft and sectional jealousies, which often resulted in disastrous sectional strikes, but also represented the first successful encounter with monopolistic industry. The manner in which Mitchell conducted the strike won him the sympathy of a public hitherto antagonistic to unionism and brought to his aid the outstanding radicals and liberals of the time, who hailed him as a new type of labor leader.

Mitchell began as a Populist and a believer in independent political action by labor. Although he was a Democratic appointee and was once mentioned as a running partner for Bryan he never shared the antagonism toward socialists common to his associates in the Federation of Labor. By the strong socialist sector in his union he was much criticized for such matters as the submission to arbitration of the 1902 anthracite strike, his failure to organize West Virginia, the reduction taken by the soft coal miners in 1904, the sectional settlements after the national soft coal strike of 1906, his failure to push aggressively for a universal system of industrial unionism within the American Federation of Labor and his advocacy of the policy of "sacredness of contract." His fame among the miners as a

strike leader, a bargainer and a general who kept factional fighting at its lowest ebb in the history of the miners' union and his reputation for ability, industry and honesty seem to have survived the announcement made shortly after his death that he had left a fortune of a quarter of a million dollars.

ELSIE GLÜCK

Important works: *Organized Labor* (Philadelphia 1903); *The Wage Earner and His Problems* (Washington 1913).

Consult: Glück, Elsie, *John Mitchell, Miner* (New York 1929); Foster, W. Z., *Misleaders of Labor* (Chicago 1927) p. 127-29.

MITCHELL, JOHN THOMAS WHITEHEAD (1828-95), English cooperative leader. Mitchell, who was born in Rochdale, Lancashire, and began work in a cotton mill at the age of ten, depended for his education on Ragged Schools, Congregational Sunday schools and his own efforts. In 1853 he joined the Rochdale Society of Equitable Pioneers and became equally interested in the educational, trading and manufacturing sides of the growing cooperative movement. In 1874 he was elected president of the Cooperative Wholesale Society and he served in this office until his death, living very simply on the small income then attaching to the post.

During the period of Mitchell's leadership the struggle between the approach to cooperative manufacture through producers' or consumers' societies reached its highest point and the British cooperative movement was something of a laboratory of social and economic experiment. Mitchell's experience convinced him that a unity of interests in business leading to a prosperous industrial world could be secured only through a nation wide and ultimately world wide cooperative organization of consumers. Such organization was feasible because the large elementary needs are similar the world over; furthermore consumers' conscious control would be right and sound, because the satisfaction of human needs is the beginning and end of labor and the only justification for capital. Both capital and labor would then be directed to real community service, and the distribution of economic surpluses to domestic consumers would end poverty. Such organization would obviate the necessity for any special machinery or bonuses to protect or remunerate the employees of the consumers' cooperatives in their role as producers. Essentially a man of action, Mitchell never elaborated his theory; but the striking success of the organ-

izations which began in small obscure societies and which followed the principles he championed (although sometimes with imperfect understanding) is testimony of his insight.

P. REDFERN

Consult: Redfern, P., *John T. W. Mitchell, Pioneer of Consumers' Co-operation* (Manchester 1923), and *The Story of the C. W. S.* (Manchester 1913); Webb, Beatrice, *My Apprenticeship* (London 1926) p. 355-95.

MITCHELL, WILLIAM (1832-1900), American jurist. Mitchell, who was born in Canada, attended school and college in Pennsylvania, was admitted to the bar in Virginia and settled in Minnesota in 1857, serving on the Supreme Court of that state from 1881 to 1900. Some of his opinions have had so important an influence upon the development of the law as to entitle him to a place among the outstanding figures in the history of the American bench. He first put the duty of the stockholder to contribute toward the payment of corporate debts upon an intelligible basis by effectually demolishing Story's attractive formula that capital stock is a "trust fund" for the creditors [*Hospes v. Northwestern Mfg. Co.*, 48 Minn. 174 (1892)]. His judicial method was realistic, the manner simple and direct. In dealing with trade and labor organizations he centered attention upon the facts of economic life, pointing out the "illusive meaning" that lay in such words as monopoly, trust, boycott and strike [*Bohn Mfg. Co. v. Hollis*, 54 Minn. 223 (1893)]. Possessing a clear conception of the social end of law he placed business usage above "mere theoretical logic" in determining questions of commercial law [*Hastings v. Thompson*, 54 Minn. 184 (1893)]. In constitutional matters he refused to press judicial power to an extreme and readily conceded the claims of the legislature to affect vested rights by enacting laws for the general welfare. He was a pioneer in sustaining laws regulating warehouse rates and prohibiting ticket scalping. In holding that an action was maintainable for injuries to land in a foreign jurisdiction he consciously departed from all English and American precedents, demonstrating that the contrary rule rested on archaic premises regarding the selection of the jury and that it often left the injured owner wholly without remedy [*Little v. Chicago, St. Paul, Minneapolis and Omaha Railway Co.*, 65 Minn. 48 (1896)].

ORRIN K. McMURRAY

Consult: Jaggard, E. A., in *Great American Lawyers*, ed. by W. D. Lewis, 8 vols. (Philadelphia 1907-09)

vol. viii, p. 385-430; Lees, Edward, in *Minnesota Law Review*, vol. iv (1919-20) 377-401; "Proceedings in Memory of Associate Justice Mitchell" in *Minnesota Reports*, vol. lxxix (St. Paul 1901) p. xxi-xlix.

MITRE, BARTOLOMÉ (1821-1906), Argentinian statesman, journalist and historian. Mitre was born in Buenos Aires and grew up on the pampas. Self-taught and of versatile mind, he is numbered among the two or three figures who have contributed most to the development of orderly civilization in Argentina since the beginning of the constitutional period in 1853. He was a sincere democrat and liberal; during the tyrannical regime of Rosas he was in exile. As a *porteño* he played a prominent part in the history of the relations between the Confederación Argentina, which was formed in 1853, and the province of Buenos Aires, which held itself aloof. He became governor of Buenos Aires in 1860, and it was only when he attained as a result of military action the political headship of the confederation that national political unity was finally consummated in 1861. As the first constitutional president of the reunited nation (1862-68) he and his administration sought to strengthen unity by a policy of tolerance and moderation, including freedom of elections, and by furthering communications, land settlement, customs reform, education and codification. Even in advanced age Mitre remained influential and the leader of a party following centering in Buenos Aires. In 1870 he founded the informative newspaper the *Nación*, through which he also wielded a powerful political influence and educated two generations of journalists; in the possession of his descendants it remains one of South America's great dailies. Mitre was interested in the historical and philological sciences and established a very rich museum of manuscripts, books and medals relating to America, which is now a state institution. As a historian he used biography as a guiding thread through events. He traced the growth of the idea of Argentinian independence in the *Historia de Belgrano* (written in 1857), a frequently revised work which he defended in an important polemic carried on with Vicente Fidel López, and dealt with Spanish American independence in the *Historia de San Martín* (1877-78). These fundamental works are based upon the critical use of abundant documentation including unedited materials; they are set forth in a strict combination of chronological and logical sequence with impartiality and little literary em-

bellishment. Although it has been disputed, corrected and supplemented on many points Mitre's historical work together with his apologies for it has oriented the methods of later investigators, who have respected him as a master.

ROBERTO F. GIUSTI

Works: Historia de Belgrano, 2 vols. (Buenos Aires 1859; 4th definitive ed., 3 vols., 1887; new ed., 4 vols., 1927-28); *Historia de San Martín y de la emancipación sud-americana*, 3 vols. (Buenos Aires 1877-78; 3rd ed., 4 vols., 1903), abridged translation by W. Pilling as *The Emancipation of South America* (London 1893); *Comprobaciones históricas*, 2 vols. (Buenos Aires 1881-82); *Archivo del General Mitre*, 25 vols. (Buenos Aires 1911-13); *Arengas*, 3 vols. (Buenos Aires 1902). *Consult: Biedma*, José Juan, Biography in Mitre's *Arengas*, vol. iii, p. 241-315; Rivarola, Rodolfo, *Mitre, una década de su vida política 1852-1862* (Buenos Aires 1921); Frers, Emilio, *Mitre, el político* (Buenos Aires 1921); Victorica, Julio, *Urquiza y Mitre* (new ed. Buenos Aires 1918); Rojas, Ricardo, "Bartolomé Mitre, His Intellectual Personality" in *Inter-America* (English ed.), vol. v (1921-22) 69-79, 181-96.

MITSUI, a powerful and wealthy family of bankers, industrialists and merchants, whose name is prominently identified with nearly three centuries of Japan's economic development. The family lineage goes back to Fujiwara no Kamatari, a noted statesman of the seventh century. During the latter part of the sixteenth century Mitsui Takayasu was forced to flee his castle during the internecine strife that marked the end of the Ashikaga era. His son Sokubei decided to devote himself exclusively to commercial activity, engaging in the brewery trade. Sokubei's youngest son, Takatoshi, who is regarded as the founder of the present house of Mitsui, worked as a lad in his brother's drapery shop in Yedo (Tokyo) and later returned to his native village, where he became a money lender under the name Hachirobei. At the age of fifty-one he left his village and opened a drapery shop in Yedo. He was later appointed purveyor to the shogun and established similar shops in Kyoto and Osaka. After operating an exchange department in his drapery shop he opened his first exchange house in the money market center of the capital in 1683, following with another in Kyoto and a third in Osaka. In 1691 the shogun appointed twelve fiscal agents, of whom two were of the Mitsui family, to effect the transmission of money from the Osaka treasury to the Yedo treasury by means of credit balances rather than by the dangerous and costly transport of specie. They were often called upon by the shogunate to participate in forced loans and served also as

bankers to the imperial court. Takatoshi had fifteen children, through whom he set up a number of branch families, the heads of which were placed in charge of his various establishments. He died in 1694 leaving a will upon which the family constitution was framed and under which today a council composed of representatives of each of the eleven Mitsui families controls and directs all their business enterprises and supervises marriages, adoptions and other family matters.

In 1708 the Mitsui established their first contacts with foreign trade when they placed purchasing agents at Nagasaki to buy foreign goods at the one port of entry, and thereafter they played an extremely important part in the expanding import and export trade of Japan. With the restoration of the emperor in 1868 the Mitsui continued as court bankers. They were called upon to finance the imperial army through the early days of Meiji, to participate in loans to the government, to transact a good part of the exchequer business of both national and local treasuries, to act as fiscal agents of the mint and to issue convertible notes for the government. They set up the first modern private bank in 1876, with branches all over Japan, and floated the first public loan of the government. They participated actively in Japan's industrialization, by direct organization of enterprises as well as through their investment banking operations. After the Bank of Japan was established in 1882 they ceased to handle the fiscal business of the Treasury but continued to have close financial relations with the government. In April, 1932, when the Japanese government desired to lend a large fund to the new regime in Manchuria in order to establish a government independent of China, Mitsui and Mitsubishi were called upon to advance the funds. The Mitsui are important shareholders in the South Manchuria Railway.

In addition to enterprises under their direct control the Mitsui own stock in many other companies, on whose directorates they are frequently represented. Their interests now include shipping, warehousing, engineering, mining, insurance, banking, tropical plantations, steel-works and many other kinds of manufacturing besides foreign and domestic commerce. Their foreign agents are said to outnumber the Japanese consuls. The Mitsui are considered the most influential element in the *Seiyukai*, or conservative, party.

JOHN E. ORCHARD

Consult: Mitsui and Company, Ltd., *The House of*

Mitsui (Tokyo 1927); Mitsui Bank, Ltd., *The Mitsui Bank, a Brief History* (Tokyo 1926); Mitsui and Company, Ltd., *The Development of Anglo-Japanese Trade* (Tokyo 1927); Viator, "Étude sur les grands consortiums de commerce japonais" in *Société Franco-Japonaise de Paris, Bulletin*, nos. 62-66 (1924-25) 53-70; "House of Mitsui" in *Fortune*, vol. i, no. 2 (1930) 72-81; Rea, G. B., "Mitsui—Where Business Is Humanity" in *Far Eastern Review*, vol. xxi (1925) 497-505; "How the House of Mitsui Helped the Seiyukai Ministry" in *China Weekly Review*, vol. lix (1932) 211-12; Beringer, P. N., "The House of Mitsui" in *Overland Monthly*, n.s., vol. lv (1910) 90-96.

MITTEIS, LUDWIG (1859-1921), German jurist. Mitteis was primarily a Romanist. Of his *Römisches Privatrecht bis auf die Zeit Diokletians*, planned as a comprehensive exposition of the subject, only the first volume appeared: *Grundbegriffe und Lehre von den juristischen Personen* (Leipsic 1908). While this work secured him an honored place among jurists it did not represent his pioneering achievement, which proceeded in a different direction.

By a stroke of good fortune he became acquainted with the work of the Viennese papyrologist Karl Wessely in editing the papyri in the collection of Archduke Rainer of Austria, which constituted an unsuspected miniature of everyday law from the fourth century B.C. to the eighth century A.D. Not content to interpret philologically the Greek legal sources of the Greek and Roman law in this and other collections Mitteis addressed himself rather to the problem of determining the significance of the law that was actually recognized in practise and its relation to the official Roman law, which often differed considerably from it. He soon established the surprising fact that the imperial Roman law was not everywhere recognized in practise, especially not in the Hellenistic provinces. While the official imperial law often asserted itself against local customary practises, it was often forced to tolerate them. The unity of the imperial Roman law was a figment.

It was soon conceded by the leading Romanists that Mitteis had established a new point of departure in the study of the Roman law. Mitteis' great service lay in his evaluation of the papyri, which he was the first to use for juridical purposes and which offered an incomparable opportunity for securing a knowledge of the juristic life of the people. The Syrian-Roman law books, already studied by Bruns, to whom, however, they had represented merely a misunderstanding of the imperial Roman law, provided Mitteis with another such opportunity. Mitteis

was the first jurist to take active and critical part in the publication of new papyri; he wrote the legal part of the *Grundzüge und Chrestomathie der Papyrskunde* (2 vols., Leipsic 1912), on which he collaborated with Ulrich Wilcken. While it is possible that in estimating the Hellenistic synthesis of Greece and the Orient he placed too strong an emphasis upon the Greek elements, his *Reichsrecht und Volksrecht in den östlichen Provinzen des römischen Kaiserreichs* (Leipsic 1891) still remains fundamental in Romanistic research. The question of origins, which can be answered only after painstaking special investigations, is the task of juristic papyrology and cuneiform legal history. Only by such means can the legal as well as the cultural historian solve the old riddle of the shares of Rome, Hellas and the Orient in the development of the culture of the ancient world.

LEOPOLD WENGER

Consult: Wenger, Leopold, Ludwig Mitteis und sein Werk (Vienna 1923).

MITTELEUROPA. *See* PAN-MOVEMENTS.

MITTEN, THOMAS EUGENE (1864-1929), American street railway administrator. Mitten, the son of an English immigrant, began his career as a telegraph operator. Becoming an executive with the Milwaukee urban electric railways in 1895, one of his first problems was a strike, which he won at great cost to the workers. During the next few years he experimented in Milwaukee, Buffalo and Chicago to secure employee loyalty by more generous treatment; in this work as well as in the general management of the lines Mitten achieved considerable success.

In 1911 bankers trying to rehabilitate the Philadelphia Rapid Transit Company, which had been wrecked largely by strikes and financial trouble, placed Mitten in control. Under a recent strike settlement the workers had been promised a gradual increase in wages. Mitten now offered a plan by which the workers should "do more to get more." Wages were to be maintained at the same percentage of the company's gross passenger revenues as the percentage in 1911; as the men cooperated with the management to produce more revenues, their wages were to be increased. The men voted to have the company deal directly with them rather than with a union, although the company recognized the right of employees to bargain collectively upon all matters affecting wages, working conditions and

discipline. Organization for carrying out the plan was to consist of graded committees composed equally of employee and employer representatives, with a final arbitration board including representatives of the public. The basis of wage adjustment was subsequently changed and the cooperative plan improved and expanded. The plan was given a full trial, but while it has prevented serious labor disturbances since 1911, this object seems not to have been achieved without supplementary measures of labor coercion.

Wages in the first years under the Mitten plan were higher than those provided for under the prior strike settlement, and the resulting increase in loyalty aided greatly in improving the company's position. Employees collectively became large stockholders of the company. Mitten's financial policy later placed the company in a precarious position with a consequent great loss to the employees. He also took voting control away from the employees by a stock trade manoeuvre.

E. ORTH MALOTT

Consult: Pamphlets and annual reports published by the Philadelphia Rapid Transit Company, especially The Mitten Plan for Collective Consideration and Co-operative Benefits (Philadelphia 1926), and *Mitten Men and Management* (Philadelphia 1922); Lauck, W. Jett, *Political and Industrial Democracy 1776-1926* (New York 1926).

MITTERMAIER, KARL JOSEPH ANTON (1787-1867), German jurist. As professor of criminal law, criminal procedure and German private law he shed luster on the University of Heidelberg for forty years, from 1821 to his death. Hearers from all lands attended his lectures, and in foreign countries he was the best known and most highly regarded of German jurists. As such he exercised an extraordinary influence. For two decades he engaged not only in scientific but political activity, which led him first in 1831 to the Baden Diet and in 1848 to the National Assembly in Frankfurt.

Mittermaier's chief importance lies in the fields of criminal law and criminal procedure. In the former he championed the greatest possible subjection of the judge to the law, the transformation of the penal system in harmony with the spirit of the times and the complete abolition of capital punishment. In the latter he fought for a liberal reformation of the existing procedure upon the model of the French law, with which he had become acquainted first as secretary of the great criminalist Feuerbach and from 1819 to 1821 as professor at Bonn. As the

goal of reform he envisaged a system of criminal procedure which like the French should rest upon the principles of publicity, orality, party presentation and free evaluation of proof. In a sensational speech at the great congress of Germanists in Lübeck in 1847 he also announced himself as an adherent of the jury system in its English-French form; this amounted practically to its official recognition by German legal science, which had hitherto opposed it. Almost all of the laws relating to criminal procedure in the period after 1848 owed their origin to his assistance or at least were influenced by his criticism as a publicist. The chief interest of his later years was prison reform. As a firm adherent of separate confinement and the American penitentiary system he championed with force and success the humanization of the contemporary German scheme of punishments. In order to ease the abruptness of a prisoner's transition from prison life to freedom he demanded the institution of a transitional stage with congruent confinement, as in the Irish system.

Mittermaier is also one of the founders of modern comparative law. He considered it his mission to bring German legal science out of its isolation and into contact with the theory and practise of other lands, particularly the English speaking countries. His arduous labor of decades had in this respect an almost unbelievable measure of success. For the periodicals which he edited he himself wrote over a period of nearly five decades countless essays covering all the more important publicistic and legislative happenings in foreign countries. He sought also to deepen his already great knowledge of foreign law by constantly undertaking new journeys which led him into all the countries of western Europe and which made him personally acquainted with most of the important jurists of his time.

ERICH SCHWINGE

Important works: *Die Lehre vom Beweise im deutschen Strafprozeß* (Darmstadt 1834); *Die Mündlichkeit, das Anklageprinzip, die Öffentlichkeit und das Geschworenengericht* (Stuttgart 1845); *Das deutsche Strafverfahren in der Fortbildung durch Gerichts-Gebrauch und Landes-Gesetzbücher*, 2 vols. (Heidelberg 1827, 4th ed. 1845-46), chs. xiii, xv tr. in Esmein, Adhemar, *A History of Continental Criminal Procedure*, Continental Legal History series, vol. v (Boston 1913) p. 13-36; *Grundsätze des gemeinen deutschen Privatrechts* (Landshut 1824; 7th ed., 2 vols., Regensburg 1846-47); *Das englische, schottische und nordamerikanische Strafverfahren* (Erlangen 1851); *Der gegenwärtige Zustand der Gefängnisfrage* (Erlangen 1860); *Die Todesstrafe* (Heidelberg 1862), tr. as *Capital Punishment*,

ed. by J. M. Moir (London 1865); *Erfahrungen über die Wirksamkeit der Schwurgerichte in Europa und Amerika*, 3 vols. (Erlangen 1864-65).

Consult: Stintzing, R. von, and Landsberg, E., *Geschichte der deutschen Rechtswissenschaft*, 3 vols. (Munich 1880-1910) vol. ii, pt. iii, p. 413-37; Goldschmidt, Levin, in *Archiv für die Civilistische Praxis*, vol. I (1867) 417-42, tr. in *Great Jurists of the World*, ed. by John Macdonell and Edward Manson, Continental Legal History series, vol. ii (Boston 1914) p. 544-60; Lilienthal, Karl von, and Mittermaier, W., in *Zeitschrift für die gesamte Strafrechtswissenschaft*, vol. xliii (1922) 157-81.

MOB. The mob is often confused with the crowd, to which it is closely related. It is almost universally regarded as a direct contact group, in which the participants strongly intercondition one another or receive the same or similar stimuli from some leader or from some external source, thus producing highly unified, but not necessarily continuous or logically consistent, collective behavior. Its behavior is ordinarily highly erratic and more intense than intelligently purposive. Sometimes the mob is not able to concentrate on any definite procedure but merely mills about, wasting its energies in uncoordinated emotional expression, incoherent discussion or gesticulation until a leader effects concentrated action. Some psychologists apply the term mob also to indirect contact groups which manifest these traits, but others question whether such groups may properly be considered mobs. The term mob spirit is applied to highly emotional and poorly coordinated behavior and expression when they occur in either direct or indirect contact groups.

The mob considered as a direct contact group is a highly excited form of the crowd. When it is an indirect contact group it may be regarded as an emotional public. The terms crowd and public are, however, ordinarily applied to less excited groups, although they may possess no more—or even less—organization than the mob. In many cases a well organized and ordinarily stable group, such as an army, a parade, a group of factory workers at their machines or even a deliberative assembly, may be converted more or less suddenly into a mob upon the presentation of sufficiently strong stimuli; as, for example, by an idolized leader or a slogan to which the members are strongly conditioned, by the hostile action of police, by an invading army or by some sudden cataclysm, such as a fire, a tidal wave or a cyclone. Casual crowds, such as those on the street, at picnics or in theaters and auditoriums, easily become mobs through such agencies.

Mobs may be classified psychologically as purposive and active and as confused and random in their behavior. The former types are invariably under the influence of leaders or of strongly activating shibboleths and emblems. The latter types are usually composed of frustrated or panicky individuals, whose normal behavior patterns have been inhibited by a period of repression or by a sudden violent interference or by strongly concentrated suggestion. In both cases the ordinary responses of the individuals constituting the mob have been disconnected from their habitual stimuli, thus removing the usual inhibitions and behavior controls. If such a breakdown of the habitual inhibitions occurs because, for example, a revolutionary leader takes possession of a deliberative assembly (in which the rules of order and the customary procedure previously have constituted the ordinary control stimuli and inhibitions), either of two results may occur. If the majority of the members are favorably conditioned to the leader's personality and principles, a purposive mob results. In such a case the leader and his principles become the effective substitute stimuli (to which the responses of the members have previously been effectively conditioned) to initiate excited purposive action of a revolutionary character. Sometimes the behavior of armies is transformed in this manner and is suddenly redirected against the persons whom a short time before the soldiers were ready to defend with their lives. Similarly a group of workers or a prison population may be suddenly transformed into a destructive rioting mob, or a camp meeting into a lynching bee. But such radical redirection of behavior can be brought about by the substitution of stimuli only if there has been previous conditioning of responses to the new stimuli. If, on the other hand, the members of the group have not had their responses favorably conditioned to the new leader and his principles, his appearance in the deliberative assembly will not produce excited purposive mob behavior along the lines suggested by the new leader and his ideas but will result in a mob responding in a confused and random manner. Spasmodic resistance may be offered by some of the members, while others will rush about more or less aimlessly or seek to escape and a few will become incoherent and incapacitated. Similar conditions often obtain at theater fires, on sinking or burning steamers and at bargain sales.

Mobs develop with special ease under social conditions in which conflicting interests, ideals

and controls are prevalent. The presence in close proximity of two or more races with fairly distinct customs, traditions and standards; of distinct social classes, such as capitalist and labor, rich and poor; of radically distinct religious alignments, each sect or religion holding firmly to its own tenets; of two rival gangs, each intent upon dominating the situation; or of two or more political parties, each with its patronage and graft to protect and candidates to elect, is especially conducive to the appearance of the mob spirit and of mob action. Such conditions easily evoke race, class, religious or partisan animosities and hatreds, which become chronic prejudices. If the accompanying conflicts and tensions are strong enough, a state of fear and uncertainty bordering on the pathological, even the hysterical, may be created. The result of such social conditions is that the individual becomes strongly conditioned to two or more conflicting sets of stimuli, perhaps positively to one and negatively to the other. Somewhat after the manner of suggestibility in hypnosis one set of responses may be quickly freed from customary inhibitions and substituted for the other set of socially approved responses, thus setting up the psychological condition known as mob spirit. The presence of other persons responding in the same manner further breaks down inhibitions and intensifies each individual's excited responses. In this way the mob may become highly irrational, uncontrolled, antisocial and destructive, which behavior may at times end in fatigue and uncoordinated dissipation of energy, in which the original object of its enthusiasm may be forgotten.

Mobs rarely accomplish much of permanent constructive value; frequently their premature organization and action interfere with a more deliberate and careful solution of the difficulty of which they are the social symptoms. Sometimes they are organized by interested parties for the purpose of preventing constructive action or of stirring up additional animosities and thus of forcing the opposite side to terms. Such rule by force and fear rarely if ever accomplishes valuable social results but more frequently redounds to the advantage of those who profit by disorder and lawlessness. Occasionally, however, the violence of the mob appears to be the only method by which a dominant group can be dislodged from a position it holds unjustly through force or unfair legalized privilege. Mobs are regarded on the whole as moral anachronisms in modern society and numerous attempts are made to prevent and control them through laws,

rules of order, religion, conventional ethics, the inculcation of good breeding, courtesy and chivalry and the use of the police and the military. Not infrequently the action of the police and the military when so employed takes on the character of mob counterviolence.

L. L. BERNARD

See: CROWD; GROUP; COLLECTIVE BEHAVIOR; SOCIAL PSYCHOLOGY; COMMUNICATION; AGITATION; PROPAGANDA; LEADERSHIP; IMITATION; SUGGESTION; COERCION; RACE CONFLICT; RIOT; MASSACRE; LYNCHING.

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MOBILITY, SOCIAL. Social mobility is the movement of individuals or groups from one social position to another and the circulation of cultural objects, values and traits among individuals and groups. It may be designated as horizontal mobility when the individual or group transition occurs on the same social level from the standpoint of income, standard of living, prestige, occupational status, educational privileges and duties or when the movement, migration, shifting and diffusion of cultural elements are within the same social stratum of the population; for example, the spread of radios and Christian Science among the American middle class from New England to California or the diffusion of communism among the Russian proletariat. Vertical mobility, which is the transition of an individual, group, cultural object or value from one social stratum to another, may be ascending or descending. It may proceed along several social ladders: the economic, when an individual, group or cultural value passes from the poor to the rich classes or vice versa; the occupational, when the movement is from the lower to the higher occupational strata or vice versa; the socio-political, when, for example, a plain citizen becomes a dominant leader of the

state, a slave becomes a free citizen, a peasant changes his juridical status to that of a noble or vice versa. Horizontal and vertical forms of social mobility are sometimes closely interwoven.

Vertical mobility, to which this analysis will be limited, proceeds incessantly in practically all societies in the form of individual transition. It is always true that some persons are becoming richer, some poorer; some are being promoted, some demoted in their occupational and political status, prestige, privileges and heritages. Vertical mobility sporadically assumes the form of group elevation when an entire group, like the Communist party in Russia after the revolution or the Christians after the legalization of the Christian church in the Roman Empire, is elevated in the pyramid of a stratified society. It sporadically assumes the form of group degradation when a complete group, like the aristocracy of the Romanovs, Hapsburgs or Hohenzollerns, is suddenly demoted from the top of the society. Similarly, cultural objects, traits and values move vertically from one stratum to another either as an infiltration of a single cultural trait isolated from its whole configuration, as the use of bathtubs, a particular rule of etiquette, a song or a perfume; or, more rarely, as a vertical transplantation of a complete cultural configuration or culture complex, as a standard of living, a religion, a moral code. The usual direction of this cultural movement is from the upper to the lower classes, from the city to the country, from the educated to the uneducated strata; but the opposite cultural movement is always present to a certain degree. In periods of great social upheaval and catastrophes the latter often becomes dominant.

Vertical mobility varies quantitatively and qualitatively in different societies and fluctuates from period to period in the same society. During the classical period of the caste system in India vertical mobility was weak, while in contemporary western society, on the contrary, it is strong in both directions. During periods of war and times of political, industrial, economic, religious and other social upheavals mobility increases; during periods of social stagnation it decreases. The development of standardized education and of improved means of communication and interaction generally favors vertical movement of cultural values; the development of exclusive class standards, class education and special juridical and religious barriers hinders it. The insufficient reproduction of the upper class-

es in many societies often creates vacancies in the upper positions, making it necessary that they be filled with persons from the lower strata. The appearance in the lower classes of talented persons excellently fitted for the upper positions and the appearance of failures in the upper classes are also factors of vertical mobility. Some of these individuals are always in the process of changing their position; if their circulation is hindered and they accumulate in large numbers within the improper stratum, a violent disruption of the social order may take place. This phenomenon is one of the most important processes of revolutions and upheavals. The incessant change of social environment which to a smaller or greater degree goes on in any society is one of the permanent factors of mobility. Any new invention, discovery, calamity or general alignment of social forces promotes some individuals and groups and demotes others.

Social institutions as the army, the church, the school, political parties, money making and occupational organizations serve as the channels of vertical circulation through which individuals ascend or descend the social ladder of their stratified society. In any society at a given period one of these institutions may play a dominant part, as, for example, the army in time of war, the church in mediaeval society and money making organizations or the school in contemporary western society. With the exception of periods of anarchy mobility is strongly controlled by the complex social machinery of testing, selection and distribution of individuals with regard to various social positions. The family, the church and the school test the general intelligence and character of the individual according to their standards; when the individual enters an occupational institution he is tested for the specific ability necessary in the successful performance of definite functions. These institutions therefore serve as social sieves; they perform not only educational and training functions but selective and distributive functions as well.

The process of vertical mobility exerts a series of important influences upon social life both by selecting the population of various strata and by mixing together the descendants of the upper and lower classes. Thus at any given moment the population of any social class is composed of persons recruited from the most diverse walks of life. The most effective distribution of individuals among various social positions is achieved if everyone is rewarded according to his talent and if the standards of the machinery

of social testing and distribution are sound. Vertical movement of cultural values and traits is one of the most potent factors against the isolation, antagonism and struggle of different social strata. It facilitates the diffusion of science, art, beliefs and manners; it gives a broad foundation and deep roots to any cultural achievement and prevents a collapse of culture through its dissipation among the masses. Intensive vertical mobility increases plasticity and versatility of behavior and stimulates progress in thought, discovery and invention. On the other hand, it appears to increase mental diseases when there are difficulties involved in adaptation to the new situation. Mobility makes the social structure elastic, breaks caste and class isolation, undermines traditionalism and stimulates rationalism. Its direct and indirect influences on all aspects of social organization are complex and potent.

P. A. SOROKIN

See: MIGRATIONS; EMIGRATION; IMMIGRATION; FRONTIER; CHANGE, SOCIAL; ASSIMILATION, SOCIAL; SOCIAL DISCRIMINATION; CASTE; STATUS; CLASS; CLASS CONSCIOUSNESS; OCCUPATIONS; URBANIZATION; HOME OWNERSHIP; ISOLATION; ETHNOCENTRISM; COSMOPOLITANISM; DIFFUSIONISM; COMMUNICATION; TRANSPORTATION.

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MOBILIZATION AND DEMOBILIZATION. The entire conception of what mobilization involves has been radically altered by the events of the World War. Even before 1914

there had been, especially after the Franco-Prussian War of 1870, a growing realization that in any future war mobilization would have to extend over the greater part of the national man power and would involve a substantial interference with the normal economic life of the nation. The development of large conscript armies, accompanied by a rapid growth in the elaborateness and cost of military equipment, had made obsolete those theories of mobilization which were conceived in terms of relatively small standing armies provided with an equipment that could be supplied without any strain on the general economic systems of the belligerent countries. But side by side with the growth in the scale and complexity of armaments there had grown up in many people's minds a firm belief that future wars were certain to be short because the issue would be decided almost at the moment of the first onset and because it was thought to be impossible for nations to stand for any protracted period the human, economic and financial strain of modern warfare. In the drawing up of plans of mobilization therefore emphasis had been laid rather on speed of movement and the quick placing in the field of a large, well equipped and trained army than on the supply of this army with continuous drafts of reinforcements and a continuous stream of fresh munitions and engines of war. The conception of a small standing army fighting its battles with comparatively small reactions on the way of living of the nation as a whole had indeed given way, at any rate in France and Germany, to the conception of a nation in arms. But the nation in arms was conceived far too much, as events proved, in terms of military man power and far too little in terms of equipment and of the maintenance of production behind the lines to meet the needs both of the armies and of the civilian populations. In Great Britain indeed the conception of the nation in arms despite the lifelong advocacy of Lord Roberts had made no general conquest even of military opinion, and the predominant view in 1914 was still that the British function in a world war would be that of keeping the seas and of throwing into the conflict a small and highly trained expeditionary force capable in collaboration with the larger armies of its allies of turning the issue at the first encounter. In Great Britain equipment had been thought of in the terms appropriate to a small professional army of this type and hardly at all in terms of an army running into millions of effectives.

It is true that this question of the nation in arms had been raised in an active form more than a hundred years before the World War at the outset of the war of defense waged by revolutionary France in the years immediately following the revolution of 1789. At that time the French found themselves threatened by hostile armies on all their frontiers and in imminent danger of military collapse. Their first thought was to augment their forces in the field by the method of the *levée en masse*—that is to say, by calling to the colors every able bodied man who could be mobilized—and plans for the *levée en masse* were seriously debated and began to be carried out. It was, however, speedily realized by the Committee of Public Safety that the *levée en masse* would be utterly fruitless unless provision was made for the supply of the armies in the field with an adequate quantity of munitions of war and that the available munitions were in fact far below the requirements even of the armies already in the field. In these circumstances the Committee of Public Safety set to work resolutely, in place of calling the entire man power of the nation to arms, to organize the supply of munitions of war. This task was rendered the more difficult both because France had been largely dependent on imported iron and steel and because some of the most important metal working establishments were near the frontier districts which had fallen into the enemies' hands, while others were under the control of persons whose loyalty to the new republic was at least suspect. Prodigious efforts were made to collect available stores of metal, to teach steel making processes to workmen hitherto unaccustomed to their use and to mobilize for industrial service workmen from a variety of occupations whose skill could be adapted to the making of munitions of war. The great center of the new manufacture was at Paris; but commissioners were also sent throughout the provinces to aid in the reorganization, to bring about a reconstruction in the existing establishments, such as those of Le Creusot and Indret, and to bring new establishments into existence. With the aid of these measures, which were carried through with extraordinary expedition, the French armies were so reequipped that they were able to roll back the invaders beyond the frontiers and before long to penetrate well beyond the boundaries of revolutionary France. At first, while these advances into new territory were still regarded as precarious, every effort was made to destroy all establishments suitable

for the manufacture of armaments in the occupied territories, the plant and available materials being carried back for use in France; but at a later stage, particularly in the case of Belgium, great efforts were made to use the occupied areas for the production of an additional supply of munitions. It is well known that Belgian industrial development is closely connected with the use made of Belgian productive resources for this purpose during the French occupation. At the same time the French engaged in a vigorous contraband trade, in the smuggling in of raw materials and of munitions from beyond their frontiers, large quantities being obtained from Germany via Switzerland in the early years of the revolutionary war. The lesson that the nation in arms is a meaningless expression unless there is a proper balance between the mobilized man power and the supply of munitions and commissariat would thus seem to have been driven home by the experience of France in the revolutionary wars. It had nevertheless been largely forgotten even by the French themselves before 1914; or rather the French conceived that modern wars would be waged under very different conditions and therefore adopted what turned out in the event to be a mistaken view of the essentials of military preparedness.

It is appropriate at this stage to attempt a brief review of the position and attitude in 1914 of the leading European powers. In France more than in any other country the doctrine that success was likely to depend on swift offensive action by a large trained army capable of very rapid movement held the field and had been made the basis of military preparation. The aim of the French military service system, based on three years' conscript service followed by a period in the reserve, had been to provide in face of the deficiency of French man power in relation to that of Germany the largest possible trained force that could be thrown immediately into the field. As this force was thought of as essentially an offensive body, its equipment had been designed rather for swiftness of movement and action than for the type of trench warfare which became predominant within the early months of the war. Moreover, as the issue was thought of as depending primarily on the outcome of the first offensive, comparatively little thought had been given either to the use and equipment of second line reserves or to the maintenance of a continuous supply of munitions and other requisites for the armies in the field.

The Germans on their side shared in full the French view of the importance of taking the offensive and realized that their situation made this imperative, because if operations were once allowed to proceed upon German territory the areas in which their coal mines and metal works and engineering establishments chiefly lay, being near the frontiers, would probably be put out of action. They too had therefore endeavored above all to provide themselves with an army well equipped for taking the immediate offensive; but far more than the French they had understood the possibility not only that the war might be protracted but also that they might find themselves by the British command of the seas cut off from external supplies and compelled to depend upon their own economic resources. This had led them to pay considerably more attention than either the French or the British to the economic aspects of preparation for war, but even they had by no means realized in advance either what the duration of the war was likely to be or the enormous calls which it would make on their industries. The chief difference in German and French preparedness lay in two things: first, in the greater emphasis which the Germans had placed before 1914 on the economic side; and, secondly, in their more effective use of their trained reserves, whereby they were able to bring their superiority in man power immediately into play by creating at once new units based on the reserve, thus duplicating at once the whole of the conscript army actually in service in time of peace. Alone among the powers they had realized that, given a large body of highly trained officers and technical personnel and a sufficient initial equipment, it would be possible to use reservists at the very outset of hostilities as an offensive force side by side with the personnel already under arms. These two things were indeed the very foundations of the initial German success. The magnitude of the forces which Germany was able immediately to throw into the front line upset all the French calculations and placed the Franco-British forces upon the defensive—a strategy which their previous preparations rendered singularly disadvantageous to them.

Of the other European belligerents it is only necessary here to add a few words about Russia. Russia possessed a large army and enormous reserves of man power, but it was singularly deficient in both technical equipment and trained leadership, while even its high command was riddled with corruption and nepotism; and, be-

ing far less industrialized than the powers of western Europe, it was from the first far more largely dependent on its allies for munitions and equipment and thereby far less able to improvise the necessary supply services by the transformation of its industries to meet war needs.

When the United States entered the war in 1917 the situation was in certain respects not unlike that of Great Britain in 1914. The United States had a small professional army but even less than Great Britain any commensurate trained reserve. It had vast industrial resources; but almost nothing had been done in advance even to consider the use of these resources for the purposes of war, although in practise the large growth of its exports to the allied countries between 1914 and 1917 had prepared the way for the rapid transformation of its industrial system to a war basis. It was consequently possible very quickly to adapt the industries of the United States to a hugely increased output of war supplies, and as by the time the United States entered the war the chief problem of the allied countries was coming to be a serious deficiency of man power for both filling up the gaps in the fighting forces and keeping their industries at work, the task set before the United States was from the outset reasonably clear. It had as speedily as possible to train a large new army to fill up the depleted ranks of the fighting forces in Europe and it had meanwhile so to increase its output of supplies as to enable its European allies, by depending more on it for war supplies and for meeting the needs of their civil populations, to release more of their industrial personnel for military service.

It will be understood from what has been said that all the belligerents who entered the war in 1914 had radically to alter their conceptions within a few months of its beginning and that this was especially true of France and Great Britain. The checking of the great German offensive short of Paris brought home to the French high command the probability of a protracted defensive war involving the occupation of a long front extending the whole length of French territory from Switzerland to the sea. The defense of this line was obviously bound to involve an enormous expenditure of resources in the supply of the necessary munitions and transport as well as the provision and equipment of a vast army for a protracted period. But the German offensive had been successful in occupying and thus putting out of action a large sector of French territory in which lay a con-

siderable proportion of France's industrial resources, particularly in the heavy industries. While therefore efforts were made rapidly to develop new sources of supply by the use of the industrial resources still remaining behind the French lines, a far larger share than had been originally anticipated of the task of keeping the allied armies supplied with war equipment necessarily fell on the metal and engineering industries of Great Britain. Until the supplies from the United States began to come in, Great Britain was called upon to play the chief part in supplying munitions of war not only for its own rapidly growing forces but also for its allies.

Even in these circumstances it was some time before any drastic reorganization took place in the British heavy industries in order to fit them for this service. For some time after the outbreak of war the War Office continued to rely, in placing its orders for munitions, on the few government factories and on those contractors who had been regularly engaged in supplying armaments before the war. Originally the whole question was left in the hands of the War Office and it was not until March, 1915, that a distinct and semi-autonomous organization was set up inside the War Office to take control of the supply of munitions. Out of this special department of the War Office grew in the summer of 1915 the Ministry of Munitions as a separate government department with a political head of its own occupying a seat in the cabinet. Some attempts had been made earlier in the year to speed up the output of shells and other munitions of war by creating in various parts of the country armaments committees representing employers and trade unions and by establishing a Committee on Production to lay down general lines for the development of the munitions services in their relation to labor. When the Ministry of Munitions was established the armaments committees were allowed to fade out of existence, the Committee on Production became merely a body for arbitrating on wages and conditions of labor, and the work of organizing the munitions services was taken over directly by the ministry. The Munitions of War Act passed in July, 1915, established compulsory arbitration in the industries providing war supplies, prohibited strikes and lockouts and provided locally for the suspension of trade union restrictions. At the same time it set up a system of "controlled establishments"; that is to say, of factories scheduled for the production of munitions. These factories were brought under direct government control

under a system by which their profits were limited and the greater part of any excess profits made in consequence of the war was to pass directly to the state. The system of controlled establishments was, however, limited to engineering, shipbuilding and other metal working firms and was not originally extended to cover either the coal industry or such industries as the Yorkshire woolen trade, which were also engaged in producing munitions in the wider sense.

The Munitions of War Act of 1915 was the first comprehensive attempt at the regulation of industry under state control. It was, however, in the early stages of the war so administered as to interfere as little as possible with the British traditions of private enterprise and *laissez faire*. Firms were instructed to carry on as usual apart from any special regulations made for them under the act, and so far from simply commandeering the various establishments the government continued to make contracts with them in respect of each particular order for goods. At this stage the entire emphasis was on speed of supply rather than cost, and many of the contracts made with munitions firms in 1915 and 1916 were on an exceedingly extravagant basis. The use of "cost plus profit" contracts in the early stages led to wide divergences in prices; but as the prolongation of the war put new emphasis on costs, uneconomical factories were assisted or compelled to adapt themselves to conditions of wartime production and "fixed contract" prices were more uniformly used. During 1916 the system was gradually tightened, but it was not until 1917 that control was anything like complete.

At the same time the problem of labor supply was becoming more and more acute. In the act of 1915 provision had been made for the enrolment of a class of workers known as war munitions volunteers, who were invited to enrol for special service and were thereafter transferable to any factory where the Ministry of Munitions considered their services to be specially needed. At this time Great Britain was still working under a system of voluntary military service, and the entire position was changed with the advent of military conscription. This came by stages, culminating in the Military Service Act of January 27, 1916, under which compulsory service was instituted for all men up to forty years of age on March 2, 1916, the period of compulsion being subsequently extended to include men up to fifty years of age. The introduction of

compulsory military service at once involved the taking of decisions as to the number of men who could be spared from the munitions works and from other industries for enlistment as soldiers, and side by side with military conscription a system of "starring" was introduced, whereby men who were starred by the Ministry of Munitions or other responsible government departments could be exempted from actual calling up. There was also under the Military Service Act a system of local tribunals before which men could apply for exemption on occupational as well as other grounds. As the need for fresh recruitment to the fighting forces grew more pressing during the later years of the war, more and more stars were withdrawn and exemption on occupational grounds was revised; and at the same time the standard of physical fitness required for military service was progressively lowered. By these means more and more men were combed out until the great mass of the less skilled workers of military age had been taken out of the factories and there remained of the original labor forces only those possessing a high degree of skill.

The gaps thus caused in the ranks of industry had of course to be filled up. This was done to a large extent by withdrawing workers unfit or over military age from the less essential occupations and transferring them to the essential industries, by the increased employment of women and young persons and by progressive mechanization designed to reduce the total demand for labor. But man power in the munitions industries had also to be supplemented by other means. To some extent highly skilled workers had to be recalled from the colors for industrial service, and men who had been so wounded as to be unfit for further service but were still suitable for industrial work were sent back to fill up the gaps in the factories.

In France with its previously established system of compulsory military service the problem of man power in industry became at an early stage even more acute than in Great Britain. In pursuance of their theory of a short offensive war the French began by calling up men almost without any regard to industrial requirements; but as soon as they had to settle down to prolonged trench warfare it became evident that large numbers of those who had been taken away would have to be returned to industry if production was to be kept up on the requisite scale. Accordingly a system of requisitions from employers for men who had been enlisted was

introduced and very large numbers of men were returned from military service under this scheme, retaining the status of reservists liable to recall in case of need. In the later stages of the war France also introduced a system of discharging from further military service the surviving members of those families which had suffered exceptionally heavy losses in the war, and this release of men provided a small additional flow of workers back into industry and still more into agriculture.

In Germany, as has been seen, steps were taken immediately upon the imminence of war to double the effective strength of the army already in service by the formation of reserve units, and at the same time men were called up to create a further reserve for the filling of gaps in the ranks. Measures were also taken immediately to organize German industry in face of the shutting off of supplies from outside. A special administration was formed at the War Department under Walther Rathenau for the organization of the supply of necessary raw materials as well as for research into the provision of substitutes for those materials of which a deficiency was certain to arise. Drastic steps were taken to requisition available supplies of materials and to set German industries at once on a war footing. In this respect Germany moved far more swiftly than the allied governments toward a system of rigid state control and economic mobilization. Meanwhile the civil authorities were largely superseded by military administrations, and Germany was divided into a series of military areas each under the authority of a general responsible to the War Department. In 1916, as the problem of man power and military and civil supplies became still more acute, a more thoroughgoing conscription of labor was instituted under what was known as the Hindenburg program, including the so-called law of auxiliary services. The militarization of the "home front" went so far as to provoke in 1917 a strong reaction on the part of German public opinion; and this necessitated some reassertion of the civil authority. But throughout the war the industrial mobilization of Germany was treated in effect as an aspect of military mobilization under the control of the War Department.

In the United States the earliest measures of importance designed in view of the outbreak of war were the formation of the Council of National Defense in August, 1916, and the setting up in March, 1917, of the Munitions Standards Board, which became the General Munitions

Board in the following month. The administrative weakness of these organizations led to the eventual formation of the powerful War Industries Board, which controlled the entire productive activity of the United States, the buying, selling and allocation of raw materials and labor and the facilities of transportation by land and sea. It determined all matters of priority, had the responsibility of fixing prices for staple commodities and acted as a coordinating body for the other wartime industrial agencies. These included the War Trade Board, the Shipping Board and Emergency Fleet Corporation, the Food and Fuel administrations, the War Labor Board, the Allied Purchasing Commission and the Railroad Administration, which operated the railroads of the country as a unit under complete federal control. Deriving its authority from the great wartime power of the president the War Industries Board fulfilled virtually the function of a general staff for American industry. In May, 1917, the Selective Service Act came into force, and provision was made under it for the immediate enlistment of 1,000,000 men. By the end of the war this number had been raised to 3,665,000, of whom more than 2,000,000 were actually in France. By the same date the number of workers, men and women, engaged on war work had risen to approximately 9,500,000. The main problem in the United States was to strike the right balance between the sending of military units to fill up the depleted allied lines in Europe and the organization of an adequate supply of foodstuffs, munitions and other requirements for the fighting forces and the civil populations of the allied countries. In the main the policy adopted by the Allied and Associated Powers was that the United States should send to Europe as many troops as it could consistently with the maintenance of necessary supplies of foodstuffs and raw materials and that the Allies, who had by that time largely solved the problem of munitions supply, should help the American army with munitions of war, being enabled so to do by the release of men from active service as they could be replaced by American soldiers.

The war not only made necessary industrial mobilization within each country but also led to a general supervision of the production of the allied nations relatively to each other. This control was of course not so strict or so closely defined as in the case of individual countries, but it was effective in correlating interallied needs and resources. Interallied control was exercised through the Supreme War Council,

which had supervision over both military and industrial affairs. The Interallied Conference and the Interallied Munitions Council were more directly responsible for the formulation of the broader principles of interallied industrial cooperation. They produced, for example, the Interallied Ordnance Agreement, by the terms of which at the beginning of American participation in the war the United States shipped raw and semifinished materials to England and France, whose wartime industrial establishments were already in operation, thus doing away with the delay which would otherwise attend the building up of America's war industries. Shipping was also subject to international control. In addition to the cooperative supervision a large degree of coordination was achieved through negotiation and agreement among the individual nations, as, for example, the work of the various allied missions to the United States.

The credit crisis which came with the outbreak of the World War emphasized the importance of financial as well as industrial mobilization. Large stocks of goods had to be created for war purposes; they had also to be paid for. The problem was a twofold one: the available supply of money and credit needed to be increased and mobilized and to be directed into the necessary channels. The funds could be secured either by drawing on the existing fiscal resources of the nations through taxation or bond issues or by creating new credit directly through the issuance of paper money or indirectly through advances from a state bank of issue in the form of banknotes. All the belligerents heavily increased their taxation and floated large popular loans. Great Britain and the United States largely financed the war in this way; the other countries were forced to adopt the other form of financing to a greater or lesser degree. The allied nations with lesser resources also secured large loans from Great Britain and the United States, particularly the latter.

So great was the need for war funds that the governments were forced to regulate strictly the movement of capital within each country, diverting it from non-essential industries to those necessary for the successful carrying on of the war. When the United States entered the war a Capital Issues Committee was formed to pass on and limit new security issues of all kinds. A similar control over new capital issues had been established earlier in the European countries involved in the war, and this control had in most cases to be retained for some time after

the war ended. In the United States this function passed in 1918 to the War Finance Corporation. Organized with a capital of \$500,000,000 owned by the United States government, the corporation had the additional function of extending new credits to essential industries and to savings banks and public utilities. Similar forms of control and assistance were exercised by the other nations.

When the Armistice was concluded in November, 1918, the various governments were at once confronted with the problem both of demobilizing the large armies on the western front and of placing their industries which had been diverted to meet the needs of war once again on a peacetime footing. The Russian armies had indeed some months earlier, in Lenin's phrase, "voted with their feet" and returned in disorganization to their villages; and in Austria-Hungary the dissolution of the empire into its constituent parts had resulted in a disorderly break up of the armies, accompanied by an extraordinarily confusing situation in each of the new states in process of formation on the ruins of the empire. But in the other countries demobilization had to proceed in accordance with a regular plan. On the one hand, the men were themselves for the most part overwhelmingly anxious to get home and exceedingly reluctant to submit to a continuance of war discipline when in their view the need for it had passed. On the other hand, not only did transport present considerable difficulties but it was certain that if the armies apart from such forces as it was intended to retain under arms were demobilized at once, there would for the most part be no jobs waiting for them when they got back, and serious social upheavals might arise as a result of their return before industry could be placed on a footing to receive them. The workers who had been brought into the war industries between 1914 and 1918 had to be transferred to a great extent to other jobs in order to make room for the returning soldiers; and the whole process of change over in industry was bound to take time, even if, as most people then supposed, there was likely to be work for all as soon as the necessary reorganization had been carried through.

The technique of demobilization had therefore to be based on a compromise. The demobilized soldiers were to be returned to civil life as speedily as there was any hope of absorbing them, but their anxiety to return home had to be curbed in order to avoid the dangers of civil

disturbance either in the military units or at home. France had in this respect a simpler problem than Great Britain, for a large mass of her conscripts were agriculturists who could for the most part at once go back to their holdings, and there was a great mass of work waiting to be done in the rebuilding of the devastated areas. French demobilization apart from the relatively large army of occupation retained in service was therefore comparatively rapid, and even in the case of Great Britain demobilization had to be speeded up beyond what had been intended in consequence of the growing difficulties experienced in keeping order in the military camps now that hostilities were at an end. This involved some form of provision for demobilized workers until they were able to find jobs; and it was also necessary to make provision for the discharged munitions workers, whose transference to other occupations was bound to take time. For these purposes a system of "donations" was introduced. Demobilized soldiers were entitled to draw in addition to the gratuity accruing to them on discharge a weekly donation benefit as long as they remained unemployed; and a similar donation on a smaller scale was also provided for unemployed munitions workers. This donation system was thereafter gradually superseded by the introduction of a general scheme of unemployment insurance under the act of 1920. By these means demobilization was actually brought about without any serious degree of civil disturbance or industrial dislocation. This was largely due to the fact that during 1919 and 1920 there was a brisk demand for labor, and industry prospered partly under the stimulus of renovation work urgently needed in consequence of the ravages of war; and partly because a rapidly rising price level due to inflation swelled industrial profits and induced employers to take on a rapidly increasing quantity of labor. The short lived post-war boom did not break until the latter months of 1920; by that time demobilization had been successfully carried through and the dangers of civil disturbance inherent in it successfully overcome.

In the meantime the various forms of state control over industry which had been introduced during the war were in most of the belligerent countries being rapidly liquidated. Alike in England, France and the United States there went up from employers on the morrow of the Armistice an urgent cry for a "return to pre-war conditions" and for the immediate abrogation of state control of industry. Despite warn-

ings that there were serious dangers in abolishing at once the elaborate systems of control which had been built up, the employers' demands were in most cases speedily conceded. Munitions factories and shipping were decontrolled, and the industries which had been under government surveillance also regained their freedom at an early stage. In England only in the case of the coal mines was it found necessary, on account of the extreme scarcity of coal in Europe and the need for preventing an abnormal rise in prices in the home market, to retain the system of control for a longer period. Government control of the coal mines did not finally lapse until the spring of 1921 and then only after the great post-war slump had set in to the accompaniment of an embittered dispute resulting from the cutting down of wages by the employers as soon as state aid to the industry was withdrawn.

The experience of the war years could not, however, be in practise so easily disregarded. In the first place the various governments in order to mobilize economic resources during the war had been compelled to call into being a far stronger organization among the employers in the various industries than had existed up to 1914; and these employers' associations and combines, although they ceased after 1918 to act as agents for the government or under the government's orders, maintained their existence, so that in all three countries capitalism emerged from the war far more highly organized and with far more tendency toward collective action than it had possessed hitherto. Moreover in both Great Britain and France the effect of the war had been to strengthen considerably the trade union movement and the forces making for the enactment of industrial legislation. And the workers in these countries retained after the war a part of the protective measures which had been adopted between 1914 and 1918 in the interests of industrial peace. The French trade union movement did indeed before long lose most of the strength which the war had added to it because of the internecine disputes between its Communist and orthodox wings. But in Great Britain and also in Germany a substantial part of the new code of industrial legislation became permanent and trade union power was considerably enhanced. In the United States constitutional difficulties stood in the way of any considerable development of industrial legislation; and the trade union movement there profited far less from the war than movements in

the European countries. The return to *laissez faire* was most complete in the United States and least complete in Germany.

In Germany indeed the circumstances of the post-war years compelled the state to retain a large measure of control over industry. German post-war economic policy was influenced largely both by the terms of the peace treaties, which compelled the government to keep a tighter hand on economic development, and by the internal situation, which gave right wing socialism a great measure of influence in the framing of the legislative code of the new German Republic. Nor was there in Germany the same traditional belief in *laissez faire* as in other countries. In consequence of these facts the wartime organization of industry pioneered by Rathenau largely survived in the state recognition and organization of cartels as well as in the industrial legislation of the immediate post-war years.

Moreover in all countries the lessons of economic organization during the war struck deep roots in many people's minds; and even where employers and traders were strong enough to force an almost complete abrogation of wartime forms of state control, the war left behind it as a legacy the idea of organized national planning which has since found more startling expression in the two Five-Year plans of the Soviet Union. Capitalists themselves became readier to recognize under post-war conditions the need for organized planning, and non-socialist projects for various forms of planning to be carried through as part of a general scheme for the rationalization of industry were put forward from time to time. Except in Germany these ideas have not yet borne much practical fruit; but they are undoubtedly much in men's minds, the more prominently because of the successful establishment of socialist planning in Russia.

Ideas of military mobilization as well as of economic organization have been fundamentally changed by the World War. In spite of the League of Nations and efforts at disarmament military plans of mobilization have continued to be conceived in terms of possible future wars on the same scale as that of 1914 and therefore involving the complete mobilization of national man power, both military and economic. In these plans far greater stress is now laid than before 1914 on the probability of any future war being protracted and exhausting and in the sphere of munitions on the indispensability of a rapid mobilization of productive resources for the supply not only of tanks, airplanes and other

engineering products but also of those gases with which no nation really believes that any other will when the time comes be prepared to dispense. The economic aspects of mobilization therefore receive in military quarters far more attention than before the war, and the close relationship between military and industrial mobilization is more clearly appreciated.

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See: WAR; WARFARE; NATIONAL DEFENSE; ARMY; NAVY; CONSCRIPTION; MILITIA; MERCENARY TROOPS; WAR FINANCE; MORALE; LIMITATION OF ARMAMENTS; DISARMAMENT; MUNITIONS INDUSTRIES; DIPLOMACY.

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MOBILIZATION, INDUSTRIAL. *See* MOBILIZATION AND DEMOBILIZATION.

MOCHNACKI, MAURYCZY (1803-34), Polish writer and patriot. From early youth Mochnacki was active in secret patriotic societies, striving for the restoration of political independence for the Polish nation. He soon gained fame as a literary critic and champion of romanticism. Influenced by German philosophy, particularly that of Schelling and Schlegel, his works nevertheless show considerable originality. Mochnacki participated actively in the outbreak of the insurrection against Russia in November, 1830, and founded the Towarzystwo Patryotyczne, the patriotic society in which in the early days of the insurrection he played a leading role in opposing negotiations with Russia. Believing that the measure would strengthen the cause of Polish independence, he advocated the abolition of serfdom and the distribution of land among the peasants. After the collapse of the insurrection, in which he was wounded several times, Mochnacki emigrated to France, where he took a most active part in the political organization of the émigrés. He attempted in numerous articles to construct a theory of revolutionary tactics which would assure the success of a future uprising. In his exclusive concentration upon the goal of political independence he lost sight of the social aspects of the revolutionary struggle

and even effected a rapprochement with the conservative-monarchical wing of the Polish émigrés, for which he was bitterly attacked by the democratic elements, his erstwhile allies. The last years of his life he devoted to his chief work, *Powstanie narodu polskiego* (The insurrection of the Polish people, 2 vols., Paris 1834), which became the political manifesto of succeeding generations.

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MODERNISM may be described as that attitude of mind which tends to subordinate the traditional to the novel and to adjust the established and customary to the exigencies of the recent and innovating. The practical effect of this attitude may be either conservative or revolutionary. It is conservative where the subordination of the old to the new saves the old from destruction through desuetude or attrition. It is revolutionary where the subordination takes the form of a nullification of the old via desuetude and attrition. The conservative species of modernism occurs among religions; the revolutionary species occurs in the arts. Significantly, neither species of modernism occurs in the sciences. Already in the eighteenth century Rousseau—in a letter to M. D., January 15, 1769—had described the humanitarianism, rationalism and tolerance of the *philosophes* as modernism, contrasting them thus with the traditional privilege, authoritarianism and coercion prevailing in society as a whole. Rousseau meant to indicate by modernism not so much a conflict with as a differentiation from the prevailing social attitude. The conceptions of modernism as conservative and revolutionary have accrued to it since. Often, the attitude of rebellion against the old, and the attitude of conserving the old by transforming it from within interpenetrated, so that their consequences became difficult to distinguish. Both attitudes are modernistic by virtue of the high valuation they lay upon the new present as distinguished from the contemporary or the past.

The dominant component of the new present

is prevailingly science. Never regarded as modernist in itself, science has been the occasion of modernism in everything else—from economics, sex and politics to religion and art. But the attributes "modernist" or "modernistic" have been attached preeminently to the last two. Modernism indeed might be described as the endeavor to harmonize the relations between the older institutions of civilization and science.

In religion this is notoriously the case. Modernism entered that institution with the French Revolution. Before the revolution the ecclesiastical establishment had been explicitly identified with supernal revelation, eternalism, dogmatism, government by divine right, the priority of church over state, the conception of personal life as the practise of obedience and devotion to the church. The French Revolution made a practical and dramatic application of the notion of the *philosophes* that institutions were made for men, not men for institutions. The socio-political economy it sought to set up was to be such as would serve men by establishing and maintaining among them "liberty, equality, fraternity." It asked men to refuse to love the king for what he was in order to love the state for what it did and initiated thus the love of country which has since been such a ruling passion. It transformed the French state into the French nation, changed subjects into citizens and made nationalism and patriotism interchangeable terms.

To the lower orders of the clergy this change was as great a liberation as to the secular lower orders. Many became notable in the humanitarian and patriotic endeavors of the period, and they naturally desired the same enlargement in the church that the state had brought them. They did not cease to cherish the church but they now cherished it as an instrument, the precious and unique instrument of salvation; and they refused any longer to hypostatize the instrument and to treat it as an end in itself. Men, they and their lay comrades declared, do not exist for the sake of the church; the church exists for the sake of men. Figures like de Lammenais, Lacordaire and Montalembert in France, Gioberti and Rosmini in Italy, exerted their utmost to identify Catholicism with the democratic and humanitarian movements of the times.

But such movements were postulated upon views of nature and man resting upon the discoveries and interpretation of the sciences; and if the church took to the one it would have to take to the other. Thus the point of departure

for a Catholic philosophy of democracy and lovingkindness in contradistinction to the traditional legitimism and absolutism would have to be the methods, the conceptions, the implications of the sciences. These, applied to the church itself, altered it from an unchanging supernatural order, divinely ordained and divinely inspired, into a historical establishment undergoing the changes and chances of historical fortune in all respects—in government, in dogma, in power. If there is unchanging identity behind the changes in history, it could be elicited only by dialectic interpretation, not empirical observation. As *Il programma dei modernisti* later declared: "Everything in the history of Christianity has changed—doctrine, hierarchy, worship." Why not then accept the fact rather than seek to explain it away? Everywhere men show the same religious spirit; everywhere they use different ideas and symbols to express it. The church, its dogmas, its sacraments, are also such expressions, and every later moment of its history is a better, more adequate symbolization of that spirit than its predecessors. Take this evolutionary view of the religious establishment, and the conflict of religion with science disappears; dogmas and sacraments lose in authority but gain in richness, adaptability and strength to survive. Thereby too the conceptions and methods of science become part and parcel of the equipment of religion itself. Historical method, archaeology, philology, anthropology and all the rest become simply techniques which the human spirit uses to discover to itself its own progress toward God. When dogmas are seen as variable symbols and sacraments as faith nourishing signs, when conscience takes precedence over authority, the union of men into a church ceases to be a regimentation by revealed authority from above and becomes a precious and indefeasible social heritage; God is drawn down from His high mountain whence He ordains an outer campaign for salvation and becomes a dweller in every human heart. So, substantially, taught Duchesne, Loisy, Blondel, Le Roy, Fogazzaro, Tyrrell, von Hügel and many others.

Protestants modernized earlier than the Catholics. Indeed Protestantism is in essence ecclesiastical modernization. Scientific method in religion, higher criticism, humanitarian passion and the like started and grew to strength in the Protestant world. But what is specifically known as modernism in the Protestant churches came later and received the name by Catholic analogy.

Modernism, says Atkins, is the engagement of the Christian mind "with the emerging scientific mind." "It would be foolish," he continues, "to say the massive Roman Catholic order has remained unchanged, but compared to the penetration of the Protestant mind by the scientific mind, Catholicism remains relatively untouched. . . . If religion maintains itself against science it will maintain itself by the use of its own weapons." The point is well made. Catholic modernists were a comparatively small handful, ultimately extirpated from the church by ecclesiastical authority. Among Protestants modernists are in control of the great and powerful church organizations. What is known as fundamentalism is fighting a rear guard action against them. It speaks for a backward agricultural population to whose consciousness the sciences of nature and man have not yet reached. Where they have reached, the reconciliation of dogma and sacrament with evolution, higher criticism and humanitarianism progresses consistently; at the same time differences between sects are disregarded, and all move toward mutual tolerance, free cooperation and unification of interests.

The same thing is true among Judaists. Intransigent and abstract reform and intransigent and ceremonially particularistic orthodoxy, which had been at swords' points, are coming together in a *tertium quid* which is characteristically a modernism. Reformers restore ceremonial and practise dietary law, declaring that they thus merely symbolize the social solidarity and historic continuity of Judaists and Judaism. The orthodox profess agnosticisms and even atheism without altering their orthodox way of life. For both the old has been preserved by penetrating it with new meanings.

In the arts modernism has a different signification. Modern art is not the same as modernist art. Modern art begins in the romantic reaction against classicism, and that also came with the French Revolution. The revolutionary government appointed as art dictator the painter David—himself a hot revolutionary who as a member of the Convention of 1792 voted to execute the king. David had been trained in the school of Rome, and so long as he was dictator the tradition of classical symbolism and *buon disegno* characteristic of that school provided the media for revolutionary expression in pageants, fêtes, painting and sculpture. Thus the republic of Rome became the pictorial hieroglyph of the republic of France, events in Roman history, of events in the revolutionary history of France.

Napoleon when he came to power retained David, making him head of the restored academy that had been abolished by David himself as feudal. He had him paint commemorative pictures of imperial history and develop the "anecdotal" theme. Between the revolution and Napoleon the traditional patronage of art ceased. On the return of the Bourbons David went into exile in Belgium. Neither he nor any other artist had any state or church or prince thereof to paint for. Their market was now speculative, their public indeterminate. To live they had to call attention to themselves. To call attention to themselves they had to oppose authority and tradition and emphasize individuality. The first step was to repudiate the school of Rome and to set up the Gothic mode against the classical. The second was to stress color as against *il buon disegno*, reality as against symbolism. The protagonist of the endeavor was Delacroix, himself born in the revolutionary tradition; from his beginnings flow the colorfulness, the passion, the realism and the sordidness of modern art.

Modernist art developed as a reaction against modern art, and it was a reaction precipitated by the impact of science. The impact came from two sources. One was the theorizing about color vision by physicists like Helmholtz and Young. The other was the invention of photography. Painters thought at the beginning that the camera could state existence as no painter could; that when it came to portraiture and the like, it would cause technological unemployment. If then the painter was to survive he must produce something that the camera could not produce. And since the inference was easy that a machine cannot utter emotion, to utter emotion became a prime objective among painters and sculptors. Nor in its beginnings could the camera reproduce color. The artist could. He could state in terms of color the intensity of light, its relation to shadow, how it is reflected, how obstructed and so on. From observations in a textbook on color vision developed the varied techniques of juxtaposing colors to express form, atmosphere, depth, action, everything. Colors juxtaposed on the canvas seen from a certain distance mixed on the retina and made a picture. And so painters like Monet and Renoir and Pissarro and Manet painted in that way, calling themselves impressionists. These impressionists may be described as the inventors of modernist art. This art reconciles science and machinery with painting, using the one to develop the other. From the impressionists break the postimpressionists,

the vorticists, the futurists, the cubists and such. Their purpose is not, however, reconciliation but secession. They turn their backs on both the camera and the tradition. They seek out the primitive, the alien, in time, place and idea. They use it as material to communicate the emotion "which the camera cannot communicate." Their paintings and sculptures intentionally distort their subject matter until it ceases to be subject matter at all and becomes simply and purely an expression of the painter's emotion in the presence of the subject. The logic of such expressionism leads to a complex geometrification of line and color in forms of pure design, with which painting and sculpture approach music. Modernist painting and sculpture thus are geometrical, abstract, distorted, emotional and at once as personal and impersonal as music.

Modernist poetry has a similar character. In such work as that of E. E. Cummings, for example, the size, the shape, the spacing and the patterns of letters, words, punctuation marks, are used as more important vehicles of communication than the sense; the poems are abstract, geometrical, distorted and precise; the movement is all, the meaning nothing. Modernist music, on the other hand, reverses the process. Although it goes in for arrhythmy, distortion and angularity of pattern like modernist poetry, painting and sculpture it endeavors to subordinate movement to meaning and to make music do the work of painting and language. Architecture cannot be said to be modernist because there has never been any need for the building art to seek or to repel reconciliation with science. Functionalism and internationalism in architecture are modern but not modernistic.

The modernistic attitude, in sum, arises where a fission develops in the social or intellectual order because a new invention or discovery has become powerful enough to impose adjustment to itself upon the resistant environment which it has entered as an interloper. The process of adjustment begins in some individual or small group whose life or work has been dislocated. Automatic at first, it soon gets rationalized into a program which wins adherents from a wider and wider range of personalities and vocations. None who ally themselves with the program are likely in the beginning to have any thought of conflict or rebellion. That comes as their conduct and labors arouse the anxieties, the fears and finally the active antagonism of the masters of the traditional establishment—the princes and nobles of the church, the academicians of the

arts, the academics of the schools. Antagonism leads to self-consciousness, formal definition and propaganda. Freely cooperative individuals become a disciplined school. Their program becomes in its turn a dogmatic object of faith and authority now fighting for its life not only against the established order it rejected but also against a fresh innovation which rejects it.

The best example of the phases of this development is perhaps the history of modernism in the Roman Catholic church. Orthodox churchmen themselves recognize that this modernism is a truly religious movement ("a religious reaction," says the *Catholic Encyclopedia*, "against materialism and positivism, both of which fail to satisfy the soul's longing"). The modernists desired only the growth of their church in glory and power. But authority at once recognized that modernist desires were incompatible with the status of the hierarchy. It consequently fought with all its power against the democratic movement in which modernism began and by necessary implication the intellectual vision from which it derived. Sixty-nine of the propositions enumerated and condemned in the *Syllabus* of Pope Pius IX would sum up the point of view and express the faith of a liberal anywhere. Leo XIII ascended the papal throne in 1878. Democracy had by that time become generally ascendant in Europe and America. Yet it was not until 1891 that he sanctioned the political and humanitarian activities that grew into Catholic socialism. *Per contra* he had recommended in 1879 the resumption of intensive studies of St. Thomas; in 1893 he warned against higher criticism and in 1899 spoke in strong terms against all phases of modernism. This was due to the effect upon Catholic youth of the brilliant work of Duchesne and Loisy in philology and history and of the fraternizing activities of the Union pour l'Action Morale where Roman Catholics came together with Protestants and Jews, and to the consequent spread of modernist reinterpretation of Catholicism among the younger clergy. Leo's successor, Pius X, did not content himself with admonitions and warnings. Modernist books were placed on the Index in greater and greater number. Unsanctioned participation by the clergy in political or social movements was forbidden. In July, 1907, the decree of the Holy Roman and Universal Inquisition, *Lamentabili sane exitu*, condemned sixty-five propositions, of which thirty-eight dealt with Biblical criticism. This was followed in September of the same year by the encyclical

Pascendi Dominici Gregis. Its official title was *De modernistarum doctrinis*. It summed up modernism as nothing but the "union of faith with false philosophy," "the synthesis of all the heresies," and declared it to be due to curiosity, pride and inadequate discipline and indoctrination. A month later in *Il programma dei modernisti* (Rome 1908, new ed. Turin 1911; tr. by George Tyrrell, New York 1908) the modernists replied that it was not their philosophy which led to historical criticism, but historical criticism which led to their philosophy. "Our religious attitude," they said, "is ruled by the single wish to be one with Christians and Catholics who live in harmony with the spirit of the age." They insisted that nevertheless they were loyal sons of the church. But to no purpose. By 1910 the leaders had been excommunicated, their works were forbidden, priests and professors were required to take an oath of fealty to all the required doctrines, and the church by traditional methods was formally purged of modernism. The traditional establishment succeeded in retaining its monopoly and cohesion.

There is no Protestant organization able to bring into action and to employ similar instrumentalities on behalf of the status quo; hence, among Protestants, fundamentalism is recessive, modernism dominant. In the arts there are no vested interests massive enough even to create such an issue. Institutes and academies are confronted by societies of independents, autumn salons and so on, which follow each other in quick succession. After the impressionists changes in the arts have been rather more like changes in the fashions than changes in the faiths. The specific meaning of modernism does not apply to them.

HORACE M. KALLEN

See: CHANGE, SOCIAL; INNOVATION; FUNDAMENTALISM; RELIGION; SCIENCE; ART; ARCHITECTURE; LITERATURE; MUSIC.

Consult: Atkins, G. G., *The Making of the Christian Mind* (New York 1928); Sabatier, Paul, *Les modernistes* (4th ed. Paris 1909), tr. by C. A. Miles (London 1908); Loisy, A. F., *L'évangile et l'église* (4th ed. Bellevue 1908), tr. by Christopher Home (new ed. New York 1912); Tyrrell, George, "To an Italian Professor" in *George Tyrrell's Letters*, ed. by M. D. Petre (London 1920) p. 115-18; Santayana, George, *Winds of Doctrine* (New York 1913); Kallen, H. M., *Why Religion?* (New York 1927); Fogazzaro, Antonio, *Il santo* (Milan 1906), tr. by M. P. Agnetti (New York 1906); Le Roy, Édouard, *Dogme et critique* (Paris 1907); Wilenski, R. H., *The Modern Movement in Art* (London 1927); Marriott, Charles, *Masterpieces of Modern Art* (London 1922); Rocheblave, Samuel, *L'art et le goût en France de 1600 à 1900* (new ed.

Paris 1923); Kallen, H. M., *Indecency and the Seven Arts* (New York 1930); Ligeti, P., *Der Weg aus dem Chaos* (Munich 1931), especially ch. iv; Müller-Frienfels, Richard, *Zur Psychologie und Soziologie der modernen Kunst*, Deutsche Psychologie, Arbeitsreihe, vol. iv, pt. 6 (Halle 1926).

MODRZEWSKI, ANDRZEJ FRYCZ (Andreas Fricius Modrevius) (c. 1503-72), Polish political theorist, theologian and statesman. Modrzewski came of a family of Polish nobility. After studying at the University of Cracow he entered the service of the primate Jan Łaski, an orthodox Catholic who strove for the moral improvement of the clergy and advocated the convocation of an oecumenical council to settle the controversies which had grown out of the Lutheran revolt. Under the influence of the younger Jan Łaski, nephew of the primate and one of the founders of the Reformed church, Modrzewski matriculated in the year 1532 at the University of Wittenberg, then the center of the Reformation. Upon his return to Poland in 1540 he participated actively in public affairs, first as royal secretary and later as secretary to the Polish delegation to the Council of Trent. Because of his Protestant leanings he was dismissed from office in 1567 and divested of his episcopal property.

The importance of Modrzewski's social and political theories has on the whole been overstressed. He has been hailed as a herald of the modern state, as an advocate of legal equality and as a representative of the third estate. All these characterizations are incorrect. In principle he favored the preservation of class distinctions and the retention by the nobility of most of its privileges. The significance of Modrzewski's political writings consists in his forceful and penetrating attack upon the unreasonable extension of these privileges. He assailed inequality in the punishment for murder, the legal jurisdiction of the nobility and the restriction whereby burghers were prevented from owning or acquiring land. He made a plea for the inviolability of peasant landed property, for freedom of movement for the children of peasants and for the exemption of the peasants from taxation. Modrzewski's treatment of the division of functions in the state has likewise been overestimated; Gumplowicz mistakenly regarded him as a forerunner of Montesquieu in this respect. Actually Modrzewski made no mention of separation of powers. The four powers which he distinguishes (the fourth is the military) are all centered in the king. He did not allow for any

permanent legislative activity and the parliament, according to his system, was more a court of law than a legislative body. Although he attached particular importance to the judicial power, sovereignty implied, for him, freedom from a superimposed judge rather than freedom from a superimposed law.

The sources of Modrzewski's thought are to be found largely in the classical tradition of humanism and in the currents of the Protestant revolt. From Aristotle he derived his atomistic rationalism and his identification of politics with ethics. He did not, however, as did Aristotle, emphasize the teleological interpretation of nature; and his more empirical method and his attitude on the questions of the evaluation of the individual, slavery and the nature of a just war constitute still further departures from Aristotle. He followed Cicero's view of the state as a *concilia coetusque hominum jure sociatos* as well as his identification of the normative with the existent. Modrzewski's concept of law was more modern, however, in that he did not identify juristic norms with the reign of law in nature.

WŁADYSŁAW MALINIAK

Works: *Opera*, 3 vols. (Basel 1559); his *Commentariorum de republica emendanda* (Cracow 1551) was translated into German by Wolfgang Wissenburg (Basel 1557).

Consult: Kot, Stanisław, *Andrzej Frycz Modrzewski* (2nd ed. Cracow 1923); Maliniak, Władisław, "Andreas Fricius Modrevius" in *Akademie der Wissenschaften, Vienna, Philosophisch-historische Klasse, Sitzungsberichte*, vol. clxx (1913) no. 10, with complete bibliography.

MOELLER VAN DEN BRUCK, ARTHUR (1876-1925), German man of letters and political writer. Moeller van den Bruck was born in the Rhineland. He began his literary activity with works on the history of art and literary criticism. From 1903 to 1912 he lived for the most part in France and Italy, where he noted among the younger writers the nationalist trend which he recognized as the spiritual and intellectual root of future wars and revolution. In his *Die Deutschen; Unsere Menschengeschichte* (8 vols., Minden 1904-10; 2nd ed. 1910) he attempted to interpret the German national type, its many-sidedness and its historical development. He then launched upon a series of monographs on national psychology which should deal with the cultural values of each nationality. Only two such monographs appeared: *Die italienische Schönheit* (Munich 1913, 3rd ed. Stuttgart 1930)

and *Der preussische Stil* (Munich 1916, 3rd ed. Breslau 1931). The World War and particularly post-war events turned Moeller van den Bruck to political writing. His *Das Recht der jungen Völker* (Munich 1919), an appeal to President Wilson in which the author cautioned the United States against a peace policy oriented along French lines, remained without influence. Thenceforth he became the passionate advocate of a national revolutionary regeneration. As leader of the "young conservative" movement he gathered around him all the young German intellectuals of the right who were united in their resistance to the dictates of the Versailles Treaty and in their opposition to western liberalism, democracy, pacifism and international socialism as well as to the forces of mere reaction. The Juni-Klub, founded in 1919, was the focal point of this movement. Besides Moeller van den Bruck, the leading figures in the group were Heinrich von Gleichen, later the founder of the Deutscher Herrenklub, the historian Martin Spahn, the political philosopher Max Hildebert Boehm, the constitutional jurist Heinz Brauweiler and the economist Karl Hoffmann. The *Neue Front* (Berlin 1922), edited by Moeller van den Bruck, Gleichen and Boehm, was the common manifesto of this circle. Moeller van den Bruck's most important essays, collected and published as *Das dritte Reich* (Berlin 1923; 3rd ed. by Hans Schwarz, Hamburg 1931), have become the catechism of all the various currents of contemporary German nationalism and the title has provided the National Socialists with their slogan—"the third empire." Moeller van den Bruck was neither a political tactician nor a systematic theorist. His thought was intuitive in character and his influence on the younger generation in post-war Germany might be compared to that of Fichte's *Reden an die deutsche Nation* during the War of Liberation. His moral earnestness, the beauty of his style and his fine sense of proportion raised him far above the demagogic propagandists of the period and were largely responsible for the powerful influence of his works after his death.

MAX HILDEBERT BOEHM

MOHAMMED (c. 570-632), founder of Islam. Little is known of Mohammed's early life before he began his career as a religious reformer. He was about forty years old when he was inspired to communicate a divine revelation to his people in Mecca to the effect that Allah, whom the Arabs already generally recognized as superior

to their other deities, was the sole God. His announcement was met by the majority of the Meccans first with indifference and later with open hostility. Accordingly, after ten years of fruitless activity, Mohammed left his native city for Medina, which was more favorable to his doctrines and where the conflicts between the various tribes had created a situation which demanded a superior leader. This expatriation, the *hegira*, was the great turning point in Mohammed's life and its date 622 marks the beginning of the Moslem calendar.

In Medina Mohammed molded into one single political organization (*Ummah*) all the different elements of the population, including the Jewish tribes and his own followers from Mecca. Conversion to Islam (*q.v.*) was not yet demanded of the unbelievers, but within the community the group of believers formed a separate unit in which religion replaced the old Arabic tribal idea as a unifying bond. Mohammed's thoughts soon turned to the conquest of Mecca, and after many struggles a truce was reached which recognized his political authority and later gave him access to the holy places. Whereas until then Mohammed had been satisfied merely to conclude political alliances with the Bedouin tribes, he now demanded that they become converted to Islam. This marked a decisive step toward the identification of the religious community with the political organization. The truce with Mecca was broken in the year VIII, but so great was Mohammed's power that no resistance was attempted and he entered Mecca without striking a blow. Most of the inhabitants thereupon embraced the Islamic religion. The political authority of the prophet and with it that of Islam now came to extend over a great part of Arabia; this resulted, however, in a weakening of the religious content of the community, since most of the new converts had embraced Islam from worldly rather than from religious motives. The Jews and the Christian tribes, with whom Mohammed was now coming into closer contact, were allowed to retain their religion upon payment of tribute. In 631 Mohammed proclaimed the *Barā'a*, in which he called for a ruthless struggle against all idolaters opposing conversion and prohibited them from visiting the Caaba.

The sincerity of Mohammed's prophetic convictions is beyond dispute. Religious genius was the most forcefully developed aspect of his personality, and with it was combined an extraordinary political capacity which made it possible

for him to prevail as a prophet. His enthusiastic perseverance in Mecca as well as his calculated course of action in Medina was a manifestation of his struggle for an idea which so possessed him that he shunned no means of realizing it. His extraordinary personal influence, which undoubtedly contributed to his success, has left an indelible impress upon Islam.

JOSEPH SCHACHT

Consult: Andrae, Tor, *Mohammed, sein Leben und sein Glaube* (Göttingen 1932); Buhl, F. P. W., *Muhammeds liv* (Copenhagen 1903), German translation by H. H. Schaefer as *Das Leben Muhammeds* (Leipzig 1930); Caetani, Leone, *Studi di storia orientale*, vols. i, iii (Milan 1911-14) vol. iii; Margoliouth, D. S., *Mohammed and the Rise of Islam* (London 1905); Nöldeke, Theodor, *Das Leben Muhammeds* (Hanover 1863); Sprenger, Aloys, *Das Leben und die Lehre des Mohammed*, 3 vols. (2nd ed. Berlin 1869); Muir, William, *The Life of Mohammad* (new ed. by T. H. Weir, Edinburgh 1912); Amceer Ali, Maulavi, *The Spirit of Islam* (rev. ed. London 1922) pt. i.

MOHAMMED II, THE CONQUEROR (1430-81), Ottoman sultan. Mohammed II ruled from 1444 together with his father Murad II, whom he succeeded in 1451. His reign was marked by a series of important conquests, the first of which was the capture in 1453 of Constantinople, which now superseded Adrianople as the Ottoman capital. Further military triumphs followed: Serbia and Bosnia, Greece and the Peloponnesus and most of the islands of the Aegean archipelago were added to Mohammed's empire; he subjugated the Greek empire of Trebizond and after the death of Scanderbeg in 1467 conquered Albania; he took Negropont and Lemnos from Venice in 1470 and Kaffa in the Crimea from the Genoese in 1475. He had already captured Otranto in 1480 when his sudden death put an end to his plans for an invasion of southern Italy.

Mohammed is rightly considered one of the greatest Ottoman rulers. Although his military victories were usually accompanied by massacres and plunder, he made it his policy to reconstruct the captured territories and to make them integral parts of a powerful, centralized, imperial state. After the victory of Constantinople he granted to the Greeks far reaching concessions, allowing them religious freedom and the election of their own patriarch. He raised both army and navy to a high state of development and consolidated the finances of the empire through a skilful system of taxation based on land tenure. Under Mohammed II the Ottoman state acquired the institutions which it retained for

many centuries. The state was regarded as a tent supported by four pillars: the viziers, the judges, the secretaries of state and the ulema, or body of learned lawyers. The provinces, administered by beys, were divided into three classes of holdings: ecclesiastical lands, private lands paying tithes or tribute and domain lands—royal and military fiefs—which in time of war were required to furnish armed horsemen in proportion to the land revenue. The sultan was absolute in power, all Turks being equal before him. Since the nobility had no special legal privileges they were unable to develop the feudal organization characteristic of occidental civilization.

Mohammed was deeply interested in art and literature and was himself an accomplished poet. He was in close touch with the literary, artistic and scientific developments of the Italian Renaissance and summoned Italian scholars and artists to his court. He encouraged architecture, built mosques, schools and colleges and founded hospitals and asylums.

FRANZ BABINGER

Consult: Jorga, N., *Geschichte des osmanischen Reiches*, 2 vols. (Gotha 1908-09) vol. ii, bk. i, chs. i-ix; Zinkeisen, J. W., *Geschichte des osmanischen Reiches in Europa*, 7 vols. (Hamburg 1840-63) vol. i, ch. x, and vol. ii; Hammer-Purgstall, Joseph von, *Geschichte des osmanischen Reiches*, 10 vols. (Pest 1827-35) vol. i, bk. xii, vol. ii, bks. xiii-xviii; "Kānūnnāme Sultan Mehmeds des Eroberers. Die ältesten osmanischen Straf- und Finanzgesetze," original Turkish ed. with German translation by Friedrich von Kraelitz-Greifenhorst in *Mitteilungen zur osmanischen Geschichte*, vol. i (1921-22) 13-48; Creasy, E. S., *Turkey*, ed. by A. C. Coolidge and W. H. Clafin, *History of Nations* series, vol. xiv (memorial ed. New York 1928) chs. vi-vii; Jacobs, E., "Untersuchungen zur Geschichte der Bibliothek im Serai zu Konstantinopel" in *Heidelberger Akademie der Wissenschaften, Philosophisch-historische Klasse, Sitzungsberichte*, vol. x (1919) no. 243.

MOHAMMED 'ABDU (1849-1905), Egyptian nationalist leader and Moslem reformer. Mohammed 'Abdu was of peasant origin; after orthodox religious schooling he entered in 1866 the theological university of al-Azhar at Cairo, where he studied and lectured until 1880. Here he came under the influence of the Moslem leader, Jamāl al-Dīn al-Afghānī, who turned him from asceticism to an interest in rational mediaeval philosophy and in the significant factors in the political relations between the Orient and the Occident; 'Abdu now perceived the necessity for pan-Islamic union and for the complete reshaping of political and social life in

the East if it were to survive the aggressions of the West. He took part in the uprising led by 'Arābi Pasha in 1882 and after its collapse went into exile, at first to Syria and in 1884 to Paris, where he collaborated with Jamāl in the publication of *al-'Urwa al-Wuthqa* (*Le lien indissoluble*), a pan-Islamic weekly dedicated to the struggle of oriental nations against foreign oppression and native despotism. The weekly was attacked by European powers and oriental autocrats, and only eighteen issues had appeared when it ceased publication. 'Abdu's political views became much more moderate after his return to Egypt in 1888, when he resumed his lectures at al-Azhar. He concentrated upon the reform of Moslem education and the adaptation of the traditional social institutions to the exigencies of contemporary life. His appeal against blind obedience to authority and for the critical use of reason was effective in both religion and politics. Although he believed firmly in the supremacy and truth of Islam he strove to regenerate it, urging a return to its original sources as well as cooperation between science and religion. He held that Egypt's freedom would be attained as a result of an evolutionary process of education, and he did much to infuse with a new spirit the tradition bound teaching at al-Azhar. In 1899 'Abdu was appointed mufti, or official interpreter, for Egypt of Islamic canon law. In this capacity his modernizing influence was far reaching. He improved the judicial procedure in the courts of personal statute (*Mahākim*), and by his *futwa* allowing for the first time the taking of interest and the drawing of dividends he made possible for Moslems the use of savings banks. As founder and president of the Moslem Benevolent Society he introduced modern methods of social work and in this field also attempted to synthesize Islamic tradition and the modern spirit.

'Abdu's writings are varied both in character and in scope. He contributed for many years to the Egyptian journal *al-Ahram* (The pyramids), and for a short period before his exile he had been an editor of the official journal *al-Waḳāi' al-Miṣriyya*. Most important in their effect upon modern Islamic thought, however, are his theological treatises. His *Risālat al-Tawhīd* (Cairo 1897, new ed. by Rachid Rida 1908; tr. into French as *Rissalat al Tawhid; Exposé de la religion musulmane*, with introduction and complete bibliography of his works, by B. Michel and M. A. Razik, Paris 1925), a complete exposition of the Moslem faith, is still the most

widely read work on the subject; while remaining faithful to the Koranic tradition and to Moslem orthodoxy, 'Abdu held that Islam was above all rational and must therefore be stripped of all the errors with which centuries of practise had encumbered it.

HANS KOHN

Consult: Adams, C. C., "Mohammed Abduh, the Reformer" in *Moslem World*, vol. xix (1929) 264-73; Horten, M., "Muhammed Abduh" in *Beiträge zur Kenntniss des Orients*, vol. xiii (1916) 83-114, and vol. xiv (1917) 74-128.

MOHAMMED AHMAD IBN SAIYID 'ABD-ALLAH (al-Mahdi) (c. 1843-85), Egyptian religious reformer. Born in the Sudan, Mohammed Ahmad studied theology under well known teachers and became a dervish celebrated for his piety and asceticism. In his wanderings through the Sudan he found that the masses had been ruined by the corrupt officials and slave dealers, who flourished under Turkish rule and especially during the reign of the extravagant Khedive Ismā'il Pasha. Depressed by these conditions and under the influence of the traditional popular rather than the theological Mahdi concepts, Mohammed Ahmad experienced his inner call to be the Mahdi, the Islamic Messiah. If his claim to this distinction was at first a purely religious one, there soon became added to it, as in the case of every such oriental movement, political and social elements. Unbearable taxation and forced labor drove the wretched, fanatically superstitious and politically aroused mixed population of the Sudan to join him and after 1881 his movement, Mahdiyya, spread rapidly to the south and east. The government's countermeasures were unsuccessful and at his death, soon after he captured Khartoum, Mohammed Ahmad was the head of an extensive empire in the Sudan. His successor was the caliph 'Abd Allāh al-Ta'ā' ishi.

In accordance with the orthodox Mahdi doctrine Mohammed Ahmad at first took the Sunna (customs of the prophet) as his model: he appointed four lieutenants who after his death were to serve successively as caliphs; the division of the booty and the administration of the government treasury were patterned closely upon the usages prevailing in the original Islamic community. Soon, however, the Mahdi replaced the Sunna of the prophet with his own, drafted in writing in the so-called *Majlis*. His vulgar mysticism, to which was joined a rigorous asceticism and an idealized concept of the original form of Islam, was hostile to culture. By pro-

scribing religious studies, by ordering the burning of all books except the Koran, his own proclamations, the *Rātib*, a collection of devotions by Mohammed Ahmad, and the *Majlis*, he repelled the educated classes. Presumably under Wahhabite influence he forbade the worship of saints, magic, ornament, music, elaborate marriage ceremonies, tobacco and wine. He attempted to unite in his own system the four orthodox schools of law and replaced the five Sunnite religious duties by six new ones: common prayer, the jihad (holy war) instead of the Sunnite pilgrimage, obedience to God's commands, confession of the faith enlarged through acknowledgment of the Mahdi and recitation of the Koran and of the *Rātib*.

Some of the elements of the Mahdiyya are derived from the Mahdi concept, rooted in Christian Jewish eschatology; others from the ascetic tendency found in the dervishism always popular in Egypt. Mohammed Ahmad desired, after the old prophecy, "to purify the earth of wantonness and corruption." He preached equality of rich and poor, abolished ranks and titles and rapidly advanced the humble to high positions. A skilful politician, he knew how to unite into one force such conflicting groups as the slaves and the slave dealers. The state which he set up was entirely militaristic but the commander differed from the common soldier only by virtue of the power conferred upon him by the Mahdi. The British under Kitchener destroyed his empire in 1899. Although in his native country his memory has practically disappeared, in Islamic history he is known as the Mahdi.

E. L. DIETRICH

Consult: Dietrich, Ernst Ludwig, "Der Mahdi Mohammed Ahmed vom Sudan nach arabischen Quellen" in *Islam*, vol. xiv (1925) 199-288, with bibliography; Holzmann, M., "Der Mahdi" in *Deutsche Rundschau*, vol. cxxxviii (1921) 64-77; Wingate, F. R., *Mahdiism and the Egyptian Sudan* (London 1891).

MOHAMMED 'ALI. *See* MEHEMET ALI.

MOHAMMED 'ALI (1878-1931), Indian Moslem leader. Mohammed 'Ali studied at Aligarh Muslim College and at Oxford and occupied various posts in the Baroda civil service. A fervent adherent of pan-Islamism, he was among the founders of the All-India Moslem League established in 1906 to protect Moslem interests against the rising tide of Hindu nationalism. Subsequent events, however, convinced him of the necessity of a united front on the part of

the oriental peoples and religious groups against European imperialism. The two newspapers which he published before the World War, the *Comrade* in English and the *Hamdard* in Urdu, began to advocate a rapprochement between Hindus and Moslems and became increasingly bitter in their criticism of European aggression against Islamic countries. Because of their pro-Turkish sympathies Mohammed 'Ali and his brother Shawkat were interned in 1915 and later imprisoned by the British authorities. Released at the end of 1919, they became the leaders of the Khilāfat movement in India which aimed at the defense of the Ottoman sultan-caliph's rights and the integrity of his territory as opposed to the anti-Turkish attitude of the contemporary British government; to further these ends Mohammed 'Ali visited England and France. Gandhi's most outstanding political achievement was to make the demands of the Indian Moslems concerning the caliphate the demands of all India; the 'Ali brothers joined Gandhi and the Indian National Congress in the non-cooperation campaign which swept over India in 1920-21 and which created a united Hindu-Moslem front against Britain's Indian policy. Upon his liberation after two years of imprisonment Mohammed 'Ali presided in 1923 at the special Indian National Congress in Delhi which decided that its members might enter the Indian councils and there form the Swaraj party. Meanwhile the Khilāfat question had been settled by Mustafa Kemal's victory over the Greeks, the sultan's deposition and the Treaty of Lausanne. Nevertheless, the 'Ali brothers continued their active interest in pan-Islamism and in freeing Islamic territories, especially the holy places of Islam, Mecca, Medina and Jerusalem, from foreign domination. They participated in the Islamic World Conference in Mecca in 1926. Mohammed 'Ali's insistence on the pre-arrangement of Moslem rights in independent India led to a breach in 1929 between the Khilāfat Committee and the Indian Congress. His last public service was his participation in the first Round Table Conference in London, during the course of which he died.

HANS KOHN

Works: Ali Brothers, Muhammad Ali and Shaukat Ali, *For India and Islam* (Calcutta 1922).

Consult: Muhammad Ali, *His Life, Services and Trial* (2nd ed. Madras 1921); Kohn, Hans, *Geschichte der nationalen Bewegung im Orient* (Berlin 1928), tr. by M. M. Green as *A History of Nationalism in the East* (London 1929).

MOHAMMED IBN 'ABD AL-WAHHĀB (1703-92), Arabian religious leader. Ibn 'Abd al-Wahhāb, the son of a family of Hanbalite Moslem theologians in central Arabia, attacked current divergences from older religious practise and demanded the discarding of all *bid'a* (innovations). The theological panoply for his struggle was furnished by ibn-Taymiya and ibn-Ḳaiyim al-Jawziya, earlier Hanbalite theologians whose puritanical spirit continually reechoed in Arabia. Smoking and many luxuries were proscribed but ibn-'Abd al-Wahhāb's attack was essentially aimed at religious innovations, such as the worship of saints, holy trees and stones and even the misused adoration of the prophet. Monotheism (*tawhīd*) in its strongest sense became the central doctrine of his followers, the Wahhabites, who term themselves monotheists (*muwahhidūn*) and regard even other Moslems as polytheists.

This central point of religious practise implied a dogmatic deviation from prevailing Islamic doctrine. Many innovations had achieved recognition through the *ijmā'*, the *consensus doctorum*. Theoretically a question once decided by consensus (even if tacitly) obtained eternal validity. Ibn 'Abd al-Wahhāb materially limited the principle of consensus and insisted that clear declarations of the Koran and ancient tradition could not be superseded by it. Practically he claimed an *ijtihād*, or independent examination of original sources, and thereby placed himself, strictly speaking, outside the dominant Sunnite community.

By winning over Amīr Mohammed ibn-Sa'ūd of Dar'iya, ancestor of the Wahhabite dynasty of Āl Sa'ūd, ibn-'Abd al-Wahhāb succeeded in establishing his conceptions in central Arabia. The sect that he founded established a commonwealth which in principles and spirit comes nearest of all Moslem states to the original conception of the prophet Mohammed.

RICHARD HARTMANN

Consult: Hartmann, Richard, "Die Wahhābiten" in *Deutsche Morgenländische Gesellschaft, Zeitschrift*, vol. lxxviii (1924) 176-213; Musil, Alois, *Northern Nejd*, American Geographical Society, *Oriental Explorations and Studies*, no. 5 (New York 1928), especially p. 258; Philby, H. St. J. B., *Arabia* (London 1930) ch. ii; Schacht, Joseph, *Der Islam mit Ausschluss des Qor'āns*, *Religionsgeschichtliches Lesebuch*, vol. xvi (and ed. Tübingen 1931) p. 154-58.

MOHAMMEDAN LAW. *See* ISLAMIC LAW

MOHAMMEDANISM. *See* ISLAM.

MOHEAU, French population theorist of the eighteenth century. Little is known of Moheau's life. It was long believed that the name was merely a pseudonym of the famous philanthropist Montyon, but at present it is generally recognized that Moheau was the secretary of Montyon. Moheau's *Recherches et considérations sur la population de la France* (Paris 1778; new ed. with introduction by R. Gonnard, 1912) is one of the first demographic treatises in French and perhaps the first of a truly scientific character; it is indispensable for students of the social history of France in the eighteenth century. Moheau does not merely record and classify demographic phenomena—a task which he performs carefully and competently; he also interprets them, taking account of their qualitative as well as of their quantitative aspects. A populationist, like most writers of his time, he believed that the wealth of the state depends upon the size of the population and the proportion of workmen in it but adopted a very moderate attitude toward the policy of systematic encouragement of population increase urged by the mercantilists. Twenty years before Malthus he posed with great precision the problem of the relation of population to subsistence; but his conclusion was not as pessimistic as that of Malthus. He apparently took into account to a greater extent than did the latter the effectiveness of repressive and preventive checks, especially the high mortality in a great many trades. He also emphasized voluntary restriction, which, from what he says, seems to have been already well established in his time, although the birth rate was very high. His discussion of the factors which might affect the development of the population is remarkably complete and abounds in penetrating observations and striking formulations.

RENÉ GONNARD

Consult: Gonnard, René, *Histoire des doctrines de la population* (Paris 1923) p. 196–207, and introduction to his edition of *Recherches et considérations . . .*, p. v–xx; Faure, F., *Les précurseurs de la société de statistique de Paris* (Nancy 1909); Labour, F., *M. de Montyon, d'après des documents inédits* (Paris 1880).

MOHL, ROBERT VON (1799–1875), German jurist and political figure. Mohl, a great grandson of J. J. Moser, shares as a jurist the latter's ease of production, range of scientific learning and inclination toward inductive collection and treatment of great masses of material.

His significance as a jurist lies in the fact that with his lucid sense of the actual he finally banished the phantom of a general German

territorial public law thus leaving himself free to project in model fashion a particular system of public law, as he did in his *Das Staatsrecht des Königreichs Württemberg* (2 vols., Tübingen 1829–31). His *Die Polizeiwissenschaft nach den Grundsätzen des Rechtsstaates* (3 vols., Tübingen 1832–34; 3rd ed. 1866) is a pioneer accomplishment in the field of administrative law despite the antiquated flavor of its title. His *Das Bundes-Staatsrecht der Vereinigten Staaten von Nord-Amerika* (Stuttgart 1824) shows him to have been thoroughly familiar with American federal institutions and to have contributed to both legal and political understanding of them abroad.

As a political figure Mohl occupies in these writings a position which he himself once characterized as that of an English Whig, a Frenchman of the left center and an American Federalist. Mohl took a leading part in the efforts toward creating a German empire. First a member of the German parliament, he was imperial minister of justice in 1848–49, and devoting himself after 1861 entirely to politics he found opportunity both as ambassador from Baden and as president of the audit office in Karlsruhe to bring his liberal ideas to practical realization. From 1874 he was a national liberal delegate in the Reichstag. With complete openness and scientific impartiality Mohl defended his political convictions without regard to the fact that his very début as an attaché of Wangenheim displeased Metternich.

As a political scientist Mohl developed under the influence of Ahrens and Lorenz von Stein the concept of social politics. While he set out from the problem of society, he took this to comprise a doctrine of the means to the attainment of the purposes of the various circles of society as well as the relation of the latter to the state and to the individual. He thus opposed the concept of society to that of the state.

Finally, Mohl's *Die Geschichte und Literatur der Staatswissenschaften* (3 vols., Erlangen 1855–58) is an admirable achievement of vast learning and polyhistoric scholarship, a work which in its monographic treatment of German and foreign writings on public and international law, economics and politics, while in many ways outmoded, remains indispensable in its comprehensive mastery of the material and the revelation of its significance to life.

ERNST VON HIPPEL

Consult: Meier, Ernst, in *Zeitschrift für die gesamte Staatswissenschaft*, vol. xxxiv (1878) 431–528; Stintzing, R. von, and Landsberg, E., *Geschichte der*

deutschen Rechtswissenschaft, 3 vols. (Munich 1880-1910) vol. iii, pt. ii, p. 401-11; Schulze-Gaevernitz, H. von, *Robert von Mohl* (Heidelberg 1886); *Anna von Helmholtz: Ein Lebensbild in Briefen*, ed. by Ellen von Helmholtz von Siemens, 2 vols. (Berlin 1929) vol. i.

MÖHLER, JOHANN ADAM (1796-1838), German Catholic theologian. Möhler was born in Württemberg and taught first at the University of Tübingen, and later at the University of Munich, to which he was summoned through the influence of his friend Döllinger. Möhler's life work was his *Symbolik, oder Darstellung der dogmatischen Gegensätze der Katholiken und Protestanten nach ihren öffentlichen Bekenntnisschriften* (Mainz 1832; 10th ed. by F. X. Kiefl, Regensburg 1921; tr. by J. B. Robertson, 2 vols., London 1843), which presents the first analysis by a Catholic of the dogmas of the various churches from an accurate historical viewpoint; without open polemic, it nevertheless bears the decided mark of the author's ecclesiastical attitude. Through his deliberate accentuation of dogmatic differences he sought to direct the struggle of faiths into objective channels and to promote mutual respect on the part of the churches. In this undertaking he was on the whole successful with regard to Germany; even in the spirited retorts by Protestants which his work called forth (notably those of Baur, Nitsch, Marheineke and later Hase) there is almost unanimous recognition of his high minded attitude, although he is accused of presenting an idealized version of Catholicism and a distorted picture of Protestantism. The permanent value of the *Symbolik* lies in the particularly illuminating and organic exposition of the Catholic ideas animating the various dogmas. Möhler did not develop these ideas rationalistically, like the men of the Enlightenment, or weave them out of pure speculation, as did the romantics; rather he grounded them objectively on historical facts. To this extent he was, next to Döllinger, the initiator of a scientific and historical theology. Möhler's conception of the church was dominated by the idea of unity; more particularly he represented the episcopal rather than the papalist standpoint. He died, however, long before this antithesis became a living political issue.

WOLFRAM VON DEN STEINEN

Other important works: *Die Einheit in der Kirche, oder das Princip des Katholicismus* (Tübingen 1825, 2nd ed. 1843); *Athanasius der Grosse und die Kirche seiner Zeit*, 2 vols. (Mainz 1827; 2nd ed., 1 vol., 1844); *Neue Untersuchungen der Lehrgegensätze zwischen den Katholiken und Protestanten* (Mainz 1834; 5th ed. by P.

Schanz, Regensburg 1900); *Gesammelte Schriften und Aufsätze*, ed. by J. Döllinger, 2 vols. (Regensburg 1839-40); *Patrologie*, ed. by F. X. Reithmayr (Regensburg 1840); *Kirchengeschichte*, ed. by P. B. Gams, 4 vols. (Regensburg 1867-70).

Consult: Wörner, Balthasar, *Johann Adam Möhler*, ed. by P. B. Gams (Regensburg 1866); Friedrich, J., *Johann Adam Möhler, der Symboliker* (Munich 1894); Goyau, Georges, *Moehler* (Paris 1905); Vermeil, Edmond, *Jean-Adam Möhler et l'école catholique de Tübingue (1815-1840)* (Paris 1913); Vigener, Fritz, *Drei Gestalten aus dem modernen Katholizismus: Möhler, Diepenbrock, Döllinger*, *Historische Zeitschrift*, Beiheft, no. 7 (Munich 1926) p. 1-75; Miller, L. F., in *Church Historians*, ed. by Peter Guilday (New York 1926) p. 240-76; Geiselmann, J., "Johann Adam Möhler und die Entwicklung seines Kirchenbegriffs" in *Theologische Quartalschrift*, vol. cxii (1931) 1-91.

MOLESWORTH, SIR WILLIAM (1810-55), British parliamentary and colonial reformer. Molesworth studied at Edinburgh and Cambridge, traveled on the continent and at the age of twenty-one was elected to Parliament, where he served with only a four-year interruption until his death. During this period of his retirement from politics, 1841-45, he devoted himself to editing the works of Thomas Hobbes. As the friend of Bentham, Mill and Grote, Molesworth launched into the movement for colonial reform, to which his wealth and social position were valuable assets. In 1835 he founded the *London Review* and merged it the following year with the *Westminster Review*, the organ of the philosophical radicals with whom he had aligned himself.

Self-government for the colonies and the destruction of the system of penal transportation were the two chief ends he set out to accomplish, and his well informed and fearless speeches in the House never allowed either issue to be forgotten. Having opposed the transportation of six laborers for trade union conspiracy, he demanded the same treatment for another conspiracy, that of organizing lodges of Orangemen in the army; citing names he called for the indictment of the duke of Cumberland and "the Right Reverend Father in God, Thomas, Lord Bishop of Salisbury" in order to teach them "and other titled criminals that . . . equal justice is now to be administered to the high and to the low." Molesworth lived to see transportation abolished. His brilliant defense of Lord Durham's settlement of the Canadian problem foreshadowed the present British Commonwealth. He protested against the prevailing extravagance in colonial administration, particularly the sums

lavished upon military defense; he died, however, shortly after his appointment as colonial secretary and before he was able to carry into effect his plans for economy.

C. W. EVERETT

Consult: Fawcett, M. G., *Life of the Right Hon. Sir William Molesworth* (London 1901); *Selected Speeches of Sir William Molesworth on Questions Relating to Colonial Policy*, ed. with introduction by H. E. Egerton (London 1903).

MOLINAEUS, CAROLUS. *See* DUMOULIN, CHARLES.

MOLINARI, GUSTAVE DE (1819-1912), Belgian-French economist. Molinari commenced his career as a journalist in Paris. In 1852 he was appointed professor of political economy at the Musée Royal de l'Industrie Belge at Brussels and later taught at the Institut Supérieur du Commerce at Antwerp. After his return to Paris he edited the *Journal des débats* from 1871 to 1876 and the *Journal des économistes* from 1881 to 1909.

Molinari represented the most extreme wing of economic liberalism in France; he consistently reduced all economic and social problems to the fundamental utilitarian principle of maximizing gain and minimizing effort and believed firmly that free competition and the unrestricted play of "natural" forces are the most effective means in the realization of this principle. His conception of the state was even narrower than that of the physiocrats; he denied to the state the right of expropriation, of currency issue, of education, and maintained that its sole function was that of creating and preserving the *milieu libre* in which individual initiative and activity shall flourish. In opposition to the socialist solution of the economic problem, he urged the extension of the corporate form of business organization, which would facilitate the diffusion of private property, and proposed the organization of international labor exchanges, analogous to that of commodity exchanges, which would increase the knowledge of the labor market, assure greater mobility of labor and thus strengthen the bargaining position of labor in the process of wage determination. While Molinari looked upon war as an early expression of the competitive principle, he condemned modern war as a great economic illusion harmful to victor and loser alike. He opposed all forms of protective tariff as relics of a rapidly disappearing order of national self-sufficiency and was prominently associated with the

movement for the formation of a customs union of the important European countries in the 1870's and 1880's.

ROGER PICARD

Chief works: *Études économiques* (Paris 1846); *Cours d'économie politique*, 2 vols. (Paris 1855; 2nd ed. Brussels 1863); *Questions d'économie politique et de droit public*, 2 vols. (Paris 1861); *L'évolution économique du dix-neuvième siècle. Théorie du progrès* (Paris 1880); *Le droit de la paix et le droit de la guerre* (Paris 1887); *L'évolution politique et la Révolution* (Paris 1884); *La morale économique* (Paris 1888); *Les bourses du travail* (Paris 1893); *Comment se résoudra la question sociale* (Paris 1896); *Esquisse de l'organisation politique et économique de la société future* (Paris 1899), tr. by P. H. Lee-Warner as *The Society of To-morrow* (London 1904); *Les problèmes du xx^e siècle* (Paris 1901); *Économie de l'histoire. Théorie de l'évolution* (Paris 1908).

Consult: Waha, Raymund de, *Die Nationalökonomie in Frankreich* (Stuttgart 1910) p. 72-96; Pirou, Gaëtan, *Les doctrines économiques en France depuis 1870* (Paris 1925) p. 104-10.

MOMMSEN, THEODOR (1817-1903), German historian. The foundations for Mommsen's work as a historian of Rome were laid at Kiel, where between 1838 and 1843 he studied under the historian Droysen, the philologist Jahn and the jurists Burchardi and Osenbrüggen; and during his subsequent travels in France and Italy, which brought him into close contact with the epigrapher Borghesi. Imbued with the liberal ideas of his time he struggled zealously against the conservative forces in German political and social life as well as for the revision of the law and constitution of Schleswig, his native state. In 1848 he became professor at Leipsic, in 1852 at Zurich, in 1854 at Breslau and from 1858 to 1885 at Berlin.

Mommsen's writings, which number 1513 titles varying from brief articles to pioneering compilations or editions and extended treatises, display at the same time untiring zeal for accuracy of detail, felicity of expression and audacity of conception. Surveying and mastering the entire range of sources—literary texts, coins, inscriptions, papyri—he penetrated into every aspect of Roman civilization, political, military, religious, economic, social and literary. The standard *Corpus inscriptionum latinarum* (15 vols., Berlin 1863-1932), a source work of fundamental significance for the social history of the Roman Empire, owes to him not only its inception but in large part its realization. In his *Geschichte des römischen Münzwesens* (Berlin 1860) he indicated the full potentialities for the use of coins in the elucidation of political and

economic problems. The unique combination of juristic and historical knowledge which he brought to the study of Roman law enabled him to make a great advance over the methods of the antiquarian historians of this field. In *Römisches Staatsrecht* (Handbuch der römischen Alterthümer, vols. i-iii, 3 vols., Leipsic 1871-88; vols. i-ii, 3rd ed., 1887) he analyzed exhaustively the public law of Rome; in *Abriss des römischen Staatsrechts* (Systematisches Handbuch der deutschen Rechtswissenschaft, sect. i, vol. iii, Leipsic 1893; 2nd ed. 1907) he delineated its historical evolution. The *Römisches Strafrecht* (Systematisches Handbuch der deutschen Rechtswissenschaft, sect. i, vol. iv, Leipsic 1899), which he published at the age of eighty-three, constitutes a definitive treatment of the nature and limits of Roman criminal law. Besides these systematic treatises he provided an invaluable guide for future investigators by his reeditions of the Roman law books. His comprehensive although incomplete *Römische Geschichte* (vols. i-iii, v Berlin 1854-56; vols. i-iii 13th ed., vol. v 10th ed., 1922-27; tr. by W. P. Dickson as *The Provinces of the Roman Empire*, 2 vols., 2nd ed. London 1909), which consists of three volumes dealing with the history of the Roman Republic from the beginning until the time of Caesar and an additional volume on the Roman provinces, laid under contribution all the varied facets of his knowledge and personality; and in his warm portrayal of the life of the people his bias toward political liberalism is clearly manifest.

The sober realism of Mommsen's exposition, in which deductive and inductive methods were subtly combined, superseded all previous approaches—those of the classicists, the romanticists and the antiquarians. Scholars in many branches of science were powerfully influenced by his restless creativeness, his methods of using the sources to reconstruct the civilization of a people, his genius for organizing scholarly enterprises, his mastery of two distinct disciplines and his literary sense. He became one of the greatest figures in nineteenth century scholarship and the potentialities of his influence are still far from exhausted.

WILHELM WEBER

Consult: Hartmann, L. M., *Theodor Mommsen* (Gotha 1908); Weber, W., *Theodor Mommsen* (Stuttgart 1929); Fueter, Eduard, *Geschichte der neueren Historiographie*, Handbuch der mittelalterlichen neueren Geschichte, vol. i (2nd ed. Munich 1925) p. 549-56; Gooch, G. P., *History and Historians in the Nineteenth Century* (2nd ed. London 1920) p. 454-65; Fowler,

W. W., "Theodor Mommsen: His Life and Works" in *Roman Essays and Interpretation* (Oxford 1920) p. 250-68; Neumann, K. J., in *Historische Zeitschrift*, vol. xcii (1904) 193-238; Gradenwitz, Otto, in *Zeitschrift der Savigny-Stiftung für Rechtsgeschichte, Romanistische Abteilung*, vol. xxv (1904) 1-31.

MONARCHOMACHS. The monarchomachs were a group of writers of various creeds and nationalities who, during the wars of religion in the sixteenth century, denied that the prince had a title to unlimited obedience from his subjects. Their object was twofold in nature. On the one hand, they were seeking a way of defending their particular religious faith from persecution; this emphasis was for the most part Protestant in character. On the other, they argued that the prince does not hold his power directly of God, but indirectly through the medium of the people. They therefore upheld, although in differing degrees, the doctrine of popular sovereignty.

The list of writers who may be included among the monarchomachs is a notable one. Ponet and Goodman in England, Buchanan in Scotland, Beza in Geneva, Duplessis-Mornay (Philippe de Mornay, seigneur du Plessis-Marly), Hotman and Doneau in France, are the most famous Protestant writers; but the two well known collections of pamphlets, the *Mémoires de l'état sous Charles IX* (3 vols., Paris 1578-79) and the similar series for Henry III, contain important material. On the Catholic side the best French writers are Louis d'Orléans, Boucher and Rossaeus, although the identity of the last named is not certain and he may be either the Frenchman Rose, bishop of Senlis, or the Englishman Reynolds; in England the work of Robert Parsons partakes in part of this school and in part of the Jesuit doctrine. Much material of interest will be found in the *Mémoires de la Ligue* (best ed., 6 vols., Amsterdam 1758), which reprints fugitive documents and pamphlets.

In each case the views of the monarchomachs were derived, even when translated into a general system, from a special environment of persecution and conflict. In England the Marian persecution, in Scotland the struggle between Knox and Mary Stuart, in France the alternating fortunes of some forty years of civil war, were responsible for their doctrines. None of them had any genuine interest in either toleration or liberty as such; all of them, unintentionally, served both those ends by the radicalism to which their situation drove them. The real root of their doctrine was less an interest in secular problems than a passionate attachment

to some given faith—the need therefore to discover a foundation in civil politics upon which its title to security might be based.

Among the cardinal features of the political philosophy characteristic of most of the monarchomachs is the doctrine of an inherent right to resist a command given by the prince, when it is contrary to the law of God. Some but not all of the Protestants deny a right of resistance in the common people and make action by the latter dependent upon a call from the nobility or the magistrates of the realm. Most frequently the monarchomachs make contract the basis of the state. The character of the contract of course differs with each writer. It is sometimes a single one in which the prince promises to act beneficently toward his subject; in this case persecution is conceived as a breach of the contract, involving a right of rebellion. Sometimes, as with the *Vindiciae contra tyrannos* (written probably by Duplessis-Mornay, Basel 1579), it is a dual contract, in which the people is pledged on the one hand to God and on the other, but secondarily, to the prince; where the latter commands that which is contrary to the will of God or, for example, massacres Protestants on St. Bartholomew's Day, the superior obligation to God takes precedence over the contractual obligation to the prince, and the latter may be resisted. The monarchomachs all preached a doctrine of natural law. Above positive law there exists a body of principles with which the former must be in accord. Where it does not so conform, there is under appropriate circumstances a duty of resistance. The monarchomachs therefore refused to accept the view of law, increasingly widespread in the sixteenth century, as a command which must be obeyed because of the source from which it emanates. They moved from the passive obedience preached by Tynedale, through the passive resistance finally condoned by Calvin, to the active resistance increasingly urged after the great French massacre.

A difference of some significance between the Protestant and Catholic schools may be noted. The Protestants, broadly speaking, preached their doctrine of contingent resistance until the accession of Henry IV of France, when the possibility of toleration, should he prove victorious, tempted them to abandon their former position for either the doctrine of the *Politiques* or a reaffirmation of indefeasible hereditary right under divine sanction. It is at this point that the Catholic writers take up the tale. Horrified at the prospect of a heretical monarch, deeply involved

in the activities of the League and in Spanish intrigues or, as in England, antagonized by the persecutions of Elizabeth, they insist that sovereign power belongs to the people, who delegate it by contract to the prince; where the latter does not fulfil the necessary conditions of good government, the contract may be broken, whereupon sovereignty reverts to the people, who may choose a new ruler. Perhaps the clearest form in which the Catholic view appears is in Rossaeus' *De justa reipublicae christianae* (Antwerp 1592). The right of the king, he argues, is limited by the purpose of the state. This is to provide the security, freedom and virtue of the subject; interference with any of these contradicts the end of the state, and the rule of the prince may be terminated by the right of rebellion. Virtue is the condition upon which liberty and security depend. But there can be no virtue without religion, and religion must mean the one true religion, which is the Catholic. Hence no non-Catholic king, for example Henry IV, is legally the rightful monarch; and no toleration of heresy is permissible since it tolerates that which, being untrue religion, cuts off from the state the support upon which the practise of virtue depends.

The pedigree and filiations of the doctrine are long. Historically it goes back to the general principles of mediaeval political thought, to contract theories like that of Manegold of Lautenbach, and especially to the revolutionary discussions of the conciliar movement. It looks forward to the characteristic doctrines of the Jesuits and in part at least through them to that Whig philosophy of the seventeenth century which received its supreme expression in Locke. It is of course closely connected with the literature of the Dutch rebellion, and hence may be said to have had a direct and important influence on schools of thought so divergent as those associated with the names of Althusius and Grotius.

HAROLD J. LASKI

See: OBEDIENCE, POLITICAL; RELIGIOUS FREEDOM; SOCIAL CONTRACT; NATURAL LAW; REPRESENTATION.

Consult: Allen, J. W., *A History of Political Thought in the Sixteenth Century* (London 1928) p. 302-42; Figgis, J. N., *Studies of Political Thought from Gerson to Grotius* (2nd ed. Cambridge, Eng. 1916) ch. v; Laski, H. J., Introduction to his edition of *Vindiciae contra tyrannos* with title *A Defence of Liberty against Tyrants* (London 1924); Labitte, Charles, *De la démocratie chez les prédicateurs de la Ligue* (2nd ed. Paris 1865); Weill, G. J., *Les théories sur le pouvoir royal en France pendant les guerres de religion* (Paris 1892); Treumann, R., *Die Monarchomachen*, Staats- und völkerrechtliche Abhandlungen, vol. i, no. i (Leipzig 1895).

MONARCHY, at least in its highly specialized modern connotation, is a far cry from the one-man rule which the Greek word originally signified. Broadly speaking it designates a peculiar type of constitutional legitimacy founded upon the pure blood of the monarch, who, no matter how limited may be the extent of his governing functions, is thereby enabled to represent the organic unity of the people. The monarch is the symbol of the living growth of a unified culture pattern of which the constitutional order is but an aspect. What made France a monarchy in the time of Richelieu was not the rule of one man—Richelieu—but the fact that there existed a hereditary king from whom he derived his authority and legitimate powers. Although it is difficult to reach a final judgment regarding the frequently advanced thesis that the need for a living symbol of unity is a correlate of monotheistic religion, it is not unreasonable to suppose that the apparent preference of the Holy Scriptures for monarchical government exerted a profound influence on the European mind. The highly individual Christian ethic cannot, however, accept as the final criterion so heathen a conception as blood legitimacy; political philosophers from St. Augustine to Treitschke have therefore expounded ethical standards whereby monarchy might be distinguished from tyranny. Plato and Aristotle no less than the New Testament offer explicit grounds for such distinctions; according to "the" philosopher only the man of transcendent virtue should be made monarch, while according to *Romans* (XIII: 1-6) the ruler is the servant of God. Important as these distinctions were for the development of a limited constitutional monarchy, they have nevertheless served to emphasize rather than to weaken the conception of blood legitimacy as a symbolic representation of unity.

Since these particular conceptual associations which have grown up around the institution of monarchy in the course of western European development cannot safely be transferred to the political systems of other cultures, political science stands in need of a generic concept, more nearly approximating the value of the original Greek *monarchia*, to designate one-man rule, whether it be monarchy, tyranny, despotism or dictatorship. Max Weber has suggested "monocracy." A general hypothesis may be advanced for the development of monocratic rule: it appears whenever a group of human beings is engaged in serious struggle for survival. The chances for such monocratic rule are as much

enhanced by dissensions within the group as by the attacks of external enemies or by natural catastrophes like floods. More recently the "crises" characteristic of our industrial society have proved a powerful contributing cause. The highly technical nature of many of these emergencies explains why the rise of monocratic rule is closely associated with the process of bureaucratization, which implies a hierarchy.

Monocratic rule and not monarchy is frequently meant when anthropologists discuss one-man rule among primitives. It prevails, or prevailed before the European conquest, in Polynesia, Africa and Peru. The economic, political, judicial and priestly functions and prerogatives of these kings, or monocrats, differ widely even within the same culture area. Such monocrats are as a rule regarded as of divine origin and their acts are invested with divine sanction; Hocart has claimed that the worship of kings is one of the earliest forms of religion. Sometimes, as in Polynesia, the nobility circumscribed the power of their kings rather carefully, so that effective monocracy disappeared. In Africa, on the other hand, kings assisted by a hierarchically graded officialdom exercised unquestionably monocratic power. Great as are the variations in detail of these monocratic political structures, they show that military leadership and judicial functions are to a greater or lesser degree concomitants of the rule of tribal chiefs in primitive culture areas. But since some groups have hereditary and others elective systems, it cannot be stated with certainty that some of the latter should not be classified as republics rather than as monarchies.

The succession of great empires in Asia Minor and north Africa from the Egyptian down to the Persian as well as the corresponding developments in India and China offers a variegated panorama of monocratic rule as the ever recurring form of governmental organization within the most diverse culture patterns. Although lack of reliable information precludes a definitive set of conclusions, it is unquestionably true that these empires turned the scale in favor of monocratic rule as the usual form of governing extensive territorial dominions in historic times.

The Greek tribes were originally governed by traditional monocrats. Divinely descended chiefs, subject in various ways to the wishes of tribal elders, performed the threefold function of general, priest and judge. However insecure the succession, the Homeric order was based on the recognition of blood legitimacy. In war-

like Sparta the hereditary kings as wartime commanders retained their importance despite the rigorous supervision of the ephors. Elsewhere the nobility succeeded in destroying monarchy, usually reducing the kingship to an elective priestly office. In historic Greece oligarchy and democracy were the alternative political forms. Although class warfare and barbarian inroads occasionally necessitated the concentration of power in the hands of a single individual, such monocratic rule was stigmatized as tyranny; and the tyrants, whose strength lay only in their personal prowess, were uniformly unsuccessful in transforming their usurped power into a permanently hereditary legitimacy. It may be noted in passing, however, that the emergence of these monocratic rulers on the outer fringes of Greek culture affords a striking verification of the fundamental hypothesis that external pressure tends to produce monocratic rule.

It is difficult to say whether these factors were responsible also for the maintenance of the traditional monarchy in Macedon, from which was to spring the brilliant monocratic regime of Alexander and his successors throughout the Hellenistic period. The grosser aspects of monocratic rule were for a time hidden from many of the prouder city-states by calling it "suzerainty." But as the suzerains succeeded in setting up local tyrants, the freedom of the cities became a shadow; and the great Macedonian dynasties remained unshaken down to the Roman conquest. Hellenistic history is largely dynastic history, exhibiting all the incidents of marital alliance, cabal and murder which so often accompany the recognition of blood legitimacy. Kings were generally deified, but outside of Asia proper such deification came only very gradually to inspire genuinely religious enthusiasm. The spread of pantheistic stoicism helped this development considerably.

The primary importance of the Hellenistic regime lies in the fact that the Macedonian monarchies served as a pattern for the Roman development. "The Roman Empire was born in the Eastern Mediterranean . . .," writes Ernest Barker in *The Conception of Empire*; "We may almost say that it was Oriental in its origin: we may at any rate affirm that it was Hellenistic; and Hellenistic means the fusion of Greek and Oriental." But while the ideological pattern of the empire was Hellenistic, there can be little doubt that the factual causes of monocratic rule were also present. The internecine strife which characterizes the century of Roman history after

the agrarian upheavals under the Gracchi became increasingly intolerable in the age of proscriptions. The growing inadequacy of the authorities under the republican constitution, particularly of the Senate, in administering the outlying dominions of the empire was made apparent by the tremendous frauds and corruptions of colonial governors. Although in his first abortive attempt to usurp monocratic authority Julius Caesar paid formal homage to the republican tradition by resting his dictatorial powers upon a specially enacted law, the power conferred by that law was unlimited and constituent (*dictatura legibus scribendis et reipublicae constituendae*). On the other hand, Octavianus, who as triumvir had wielded similar constituent power, returned all this power to the people and the Senate on January 13, 27 B.C. In turn he became *princeps* and *Augustus*. Thus the outward forms of a republican constitution were preserved while an almost unlimited monocratic rule was established in fact, although it was temporarily held in check by the power of the Senate. Mommsen has characterized this system as diarchy. It follows that the ruling power of the principate does not simply mark the end of the constitutional period and the beginning of absolutism, but rather an endeavor to reestablish constitutional rule and to bring to a conclusion the period of absolute rule under dictators and triumvirates. Yet it amounts to an implicit recognition of the need for monocracy. This diarchic system consequently did not succeed for long. The continued pressure of outside enemies and internal dissensions continued to operate in the direction of monocratic rule of the most absolute sort; when in the third century Diocletian openly legalized such rule, he was merely stating in law what had long been a fact.

This change in the status of the emperor may be considered a reflection of a fundamental transformation in all conceptions of life and the universe in that period. For the Greek and the Roman of the classical and postclassical period the state was the central focus of life; religion was one of its aspects. The state might be a city worshipping its particular god or an empire worshipping a deified emperor as the incarnate symbol of its sway. In either case the dominant thought was secular; it was of this world. By the third century A.D. a profound change had taken place. The life hereafter became the dominant interest of human existence. For many centuries the basis of community was religious in the peculiar sense which religion must acquire

when it stresses dogmatic conceptions of other-worldly salvation. Moreover a monotheistic conception of the deity conceived of in equally explicit dogmatic terms was associated with this religion. In a world dominated by such a faith monocratic rule was bound to become a matter of course, partly because it is the simplest expedient of maintaining order and partly because it corresponds to that intense feeling for unity which also expresses itself in a monotheistic cosmology. But it was only the Eastern Roman Empire which could preserve this heritage, until the last Byzantine emperors handed it on to the Russian czar, through whom it continued until 1917 to mold the destinies of European civilization.

In the west a new pattern of life caused monocratic rule to develop in a different direction. After the Western Empire had been destroyed by the migrating Germanic tribes, the Roman bishop kept alive the idea of universal empire through his insistence upon the unity of Christendom as organized in the church of which he was the head. On the other hand, the Germanic tribes, like many other primitive groups, had kings whose main function was to lead the tribe in battle, while in times of peace all free men acted in common. Under the influence of the continuous fighting during the period of migrations the king's position showed a more decided tendency to become genuinely monocratic. Moreover in the former Roman provinces, like Gaul and Britain, the Roman provincials accepted the king as lord (*dominus*); but they were not received into the Germanic community of freemen and thus the tribal kinsmen became a kind of upper caste. There has been a great deal of learned controversy with regard to the intertwining of Germanic and Roman institutions in this period of confusion, but it cannot be doubted that the two were amalgamated in varying degrees. The most curious blending, which permanently affected the European conception of monarchy for centuries to come, occurred when the Roman bishops urged the Frankish king Charles to accept the imperial Roman crown at the hands of the pope (800 A.D.). The occasion was a temporary vacancy on the imperial throne of Byzantium; Charles' halting consent to the proposal foreshadowed the conflicts which were inherent in this dualism of universal priesthood and universal empire. Although this first attempt to reestablish the Roman Empire proved unsuccessful, the inner necessity of the idea which it embodied was shown by the more last-

ing revival under Otto the Great in 962 A.D. The contrast between the imperial office and Germanic kingship has been well summarized by Bryce: "No two systems can be more unlike than those whose headship became thus vested in one person: the one centralized, the other local; the one resting on a sublime theory, the other the rude offspring of anarchy; the one gathering all power into the hands of an irresponsible monarch, the other limiting his rights and authorizing resistance to his commands; the one demanding the equality of all Christians as creatures equal before Heaven, the other bound up with an aristocracy the proudest, and in its gradations of rank the most exact, that Europe had ever seen."

Although the revival of the empire under Otto was intimately related to the colonization and Christianization of the Slavic east, this objective was almost entirely lost sight of in the days of the struggle over the investiture of bishops and of the crusades which followed it. The cultural pride and the growing wealth of the Italian people in the twelfth and thirteenth centuries asserted themselves against the "barbaric" north in the aspirations of the pope and the Roman "hierarchy" to universal empire through universal priesthood. The presumed holiness of the empire seemed to lend color to their claim to sit in judgment over the acts of emperors and kings. But no sooner had imperial unity been effectively destroyed than the papal authority itself collapsed, and the imperial pretensions were claimed by kings and cities alike. The answer to Boniface VIII's bull *Unam sanctam* was the Babylonian captivity of Avignon. Henceforth Europe moved toward the modern system of a balanced group of national states, and monarchy assumed its new role of integrating the several linguistic culture areas in terms of the respective organic unity of a people or nation.

The sixteenth and seventeenth centuries saw a notable intensification of the monarchical principle everywhere in Europe, because of the opportunity it offered for the strengthening of monocratic control. In times of transition and confusion the need for a vigorous centralization of command is always most keenly felt; and the religious wars following the Reformation were threatening to reduce Europe to political chaos, while the Turkish attacks strained Austria's strength to the breaking point. In such troubled times rigorous efficiency was an absolute prerequisite of survival. This threw unusual importance on the monarch, who alone of the existing

authorities was in a position to forge the territorial state into an effective instrument of power. Religious dissension, especially in Protestant countries, had weakened the church as an independent and comparatively neutral arbiter. The estates, parliaments and other such authorities of the mediaeval constitutional state were even less effective under the new conditions. Their corporate organization precluded prompt and vigorous action; their vested interests in the maintenance of feudal privileges dulled their reformatory initiative; and their influence was diminished by the fact that they had arisen in connection with the ancient tribal units, which ordinarily had no more than a provincial importance within the more comprehensive territorial or national state. Alone among the institutions of the mediaeval order the kingship was capable of development to suit the contemporary needs. To be sure, two countries on the periphery of European culture, England and Sweden, fairly compact in Protestant sentiment and sufficiently aloof to be secure from the military interventions of neighbors, succeeded in maintaining and developing their corporate organization; but the attempt to do likewise in Poland spelled national disaster.

The need for strong central action led to an extensive development in political theory of the concepts of the *plenitudo potestatis* and of sovereignty. The absolutist conception of the sovereign as the source of all law received its culminating expression in Hobbes and Spinoza, although the less uncompromising views of Bodin and Grotius were more influential. In practise there was no systematic attempt by the king to supersede all existing authorities, but merely to supplement them where necessary. This was accomplished through the use of commissioners, royal agents possessing no independent legal competence but acting solely in the name of the king. Integrated by their mutual dependence on the monarch, they formed the basis for a centralized royal administration. Motivated primarily by the desire to secure domestic tranquillity and military efficiency, these officials, of whom the French intendants were typical, soon assumed wide administrative tasks. Regular revenues being indispensable, they undertook financial administration and even, most notably in Prussia, made systematic attempts to foster the general prosperity on which revenues ultimately depend. Administrative needs often necessitated royal decrees, but the traditional judicial authorities were usually

retained. Thus the monarch, although subject to various traditional limitations in his legislative and, more particularly, judicial authority, ultimately became the center of a strong and independent bureaucratic machine suited to the administrative needs of the modern state. Kings were in the process of becoming thoroughgoing monarchs.

As the creator and guarantor of national institutions the king was strong in popular favor, especially among the commercial classes, which primarily desired ordered peace and freedom from feudal restrictions. The position of the royal court as a focus for the intellectual and artistic expression of the age helped to forge the nation into a cultural unity. Thus the traditional veneration of the monarchy, to which some new religious sanctions were now added—although the theory of divine right was not widely accepted—was reenforced by gratitude for present services. Mediaeval constitutionalism, at first vigorously supported by the monarchomachs, received in the eighteenth century dwindling and, save for Montesquieu, undistinguished intellectual support, while the *Fronde* demonstrated the practical impotence of its interested adherents. The absolutist monarchy, to be sure, displayed weaknesses. Since the concentration of political power in the king made exacting demands on his personal ability and industry, alternations of disintegration and reform necessarily accompanied the hazards of the royal succession. Yet the eighteenth century produced numerous dutiful and able monarchs. The general acceptability of the system is reflected in the fact that men like Voltaire and the physiocrats, accepting monarchy as the traditional instrument of reform, trusted solely in enlightened despotism for the attainment of their social ideals.

England, Scotland and Sweden stood apart from this continental development. Primarily because of their compactness and isolation mediaeval England and Sweden had developed unusually centralized administrative and parliamentary institutions. Although the anarchy of the War of the Roses called forth the Tudor absolutism, it also eliminated many feudal abuses and, by the virtual annihilation of the old nobility, left Parliament in the hands of the middle classes. Hence revolutionary absolutism was less necessary here than on the continent, and the Tudor sovereigns were able to rule largely through constitutional forms. The pedantic absolutism of the Stuarts, being superfluous, was

successfully resisted by the strongly organized constitutionalists representing the rising commercial classes. The Revolution of 1688 finally established the supremacy of Parliament, thus laying the foundations for an early development of constitutional monarchy.

In Sweden, on the other hand, the nobility never succeeded in gaining ascendancy over the peasants, and thus the ancient Germanic community of freemen remained intact. This was impressively shown by the rise of a commoner, Gustavus Vasa, to the kingship. Although a drift toward absolutism is discernible under his successors until the time of Gustavus Adolphus, after that king's untimely death his gifted chancellor Oxenstierna undertook to rule with the support of the parliament (Riksdag) and thus initiated the period of extreme parliamentary government (*frihetstiden*), which carried over after only a brief interlude into the modern constitutional period.

While the English example later exerted a profound influence, it did not immediately retard absolutist development on the continent. France was the rock on which absolutism was to founder. The peculiar relation of the French monarchy to its hereditary enemy, the nobility, largely accounts for its ultimate failure. Elsewhere, as in Prussia, the king effected national reorganization with the aid of devoted middle class bureaucrats, while the nobles were relegated to the seclusion of their estates. It was thus possible for the royal administration to remain fairly responsive to the reformatory needs of the rising commercial classes. In France, however, the nobles were transformed into courtiers and themselves pressed into the service of the national state. This intrenchment of vested feudal interests in the new order served to neutralize the reformatory efforts of weaker kings. Monarchy stagnated, and when royal extravagance and inefficiency finally produced national bankruptcy, the newly discontented middle classes reluctantly looked elsewhere for the completion of the rational reorganization of the national state. This was accomplished in the course of a series of republican experiments ending in the revolutionary dictatorship of Napoleon.

However special its immediate causes, the French Revolution marks a turning point in the history of monarchy. Henceforward the tendency was to transfer active political functions to popular representatives. The lasting success of the American Revolution, combined with the democratic fervor communicated by the the-

orists of France, encouraged attempts to satisfy political needs through representative institutions. The democratization and later the industrialization of the masses brought into prominence classes ever less appreciative of tradition. Concurrently monarchy itself became less effective as revolution frightened monarchs into an inappropriate conservatism. Nor could it in any case have long remained adequate, for the growing complexity of modern social and military organization now required the technical genius of a Napoleon rather than the astuteness of a Henry IV. But the retreat from absolutism was gradual. The usual course was for the monarch, by a theoretically free exercise of that *plenitudo potestatis* which he still claimed, to grant a constitution based, if not in theory, at least in fact on a supposedly English separation of powers between the king-executive and the popular legislature. Since the position of the cabinet in England was not understood, the problem of ministerial responsibility was not settled. Some countries, like France, rapidly developed on English lines toward the assumption of real executive power by a cabinet dependent on parliament. In others, like Prussia, ministers remained responsible to the king, the separation of powers thus becoming a temporary bulwark of royal executive authority. But even Germany ultimately reflected the universal tendency toward the assertion of parliamentary ascendancy.

Although consciously on the defensive, monarchy generally persisted in these constitutional forms until the World War. The two Napoleons, as mere party leaders, naturally failed to perpetuate revolutionary dictatorship as traditional monarchy. Yet the ancient monarchies survived the loss of their active powers because of their value as a symbolical embodiment of the national unity. Being historically identified with the glorious past on which the national consciousness is based, the king serves by his mere presence, like a flag, as an emotional focal point for the national energies, a fact well expressed by de Maistre. Above all parties, the king acts, to use Constant's phrase, as a neutral power. Such an arbitral function is exercised when the English or the Belgian king supervises the selection of a new government in a cabinet crisis. The official duties of modern kings are usually greatly restricted, although their personal influence has often been considerable, especially in foreign affairs. But monarchy justified solely by its capacity to inspire sentiment is somewhat fragile, especially in an age which is too transitional to

have a strong feeling for tradition. To avoid apparent partisanship is a delicate task, especially as class tensions increase; and yet the fate of the defeated monarchies after the World War shows how dangerous it is to identify oneself with unsuccessful policies. Monarchies are gradually disappearing, nor do efforts at monarchical restoration seem generally promising. This tendency may, however, be reversed, if the present drift toward monocratic rule in the form of dictatorship continues. As in the days of Augustus, monarchical restoration by providing executive leadership may come to be looked upon as the most promising method of reestablishing constitutional government.

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See: GOVERNMENT; ABSOLUTISM; AUTOCRACY; TYRANNY; DICTATORSHIP; EMPIRE; HOLY ROMAN EMPIRE; RELIGIOUS INSTITUTIONS; TRADITIONALISM; DIVINE RIGHT OF KINGS; MONARCHOMACHS; CONSTITUTIONALISM; DEMOCRACY; REPUBLICANISM; ABDICATION; ACTION FRANÇAISE.

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MONASTICISM. Christian monasticism is an outgrowth of the ascetic ideal implicit in the religion of Christianity and is the expression of a

desire for self-surrender and renunciation. This instinct of human nature is revealed also in Buddhism, especially in Tibet (see **BUDDHISM**, section on **INSTITUTIONAL ORGANIZATION**), and among the fakirs and dervishes of Islam. The institution of monasticism in all its forms has, however, nowhere developed to such a degree as in Christianity. Certain pre-Christian expressions, especially among the Jews, may have had considerable influence on Christian development. Among the Jews of Alexandria and Egypt the principles of monasticism seem to have been fully formulated at the dawn of the Christian era. *De vita contemplativa*, probably written by Philo, tells of a sect of Jews near Alexandria, called *therapeutai*, or devotees, who were accustomed to retire to the hills south of Lake Mareotis, where they led a "philosophical" life of poverty, chastity, meditation and labor.

Better known than this sect was that of the Essenes. These Jewish ascetics, whose center was near the Dead Sea, based their way of life on the old gnostic idea of the malignity of matter. As part of their struggle to avoid pollution they indulged in frequent bathings, rejected animal food, wine and warm baths and wore linen rather than wool because of its higher ceremonial purity. Their ideal was a seminomad corporate life with entire community of goods and unconditional obedience to the head. They accepted marriage, otherwise regarded as an abomination, as needful for the preservation of the race. But at best woman was a mere instrument of temptation. One part of their discipline consisted, as later with the Benedictines, in manual labor.

The rise of Christian monasticism coincided broadly with the adoption by Constantine of Christianity as the official religion of the empire and with the resulting worldliness of the church. Against this lowered ideal monasticism was a protest, a return to ancient simplicity and purity and an emulation of the poverty of Christ. Of necessity this return was not to a new ideal in the church itself or even alongside the church, nor did men seek for it in the apocalyptic visions of earlier days; it lay above, and even in a sense outside, the church. Although monasticism is often viewed as one of the most formidable weapons which the church possessed, it is important to point out this opposition between the church and the monastic ideal. The church has never yet directly founded a religious order; in every case the orders have been the outcome of individual enthusiasm. Moreover monasticism

has never attempted to reform the church and still less the state, with the one exception of the Cluniac movement (*q.v.*). Monasticism has always been too individualistic, too much outside the church, to attempt any reform except of itself. Another consequence of the distinctness of monasticism from the church is of the utmost importance. In its origin monasticism was the protest of the lay spirit against any conception of religion which excluded the laity from the supreme obligations or from the attainment of holiness. Until the end of the fifth century the monk was generally regarded as a layman; in fact the rise of monasticism was a reaction to the establishment by Cyprian of the Catholic church upon a sacramental sacerdotal basis. As a priest the monk had no place higher than his brethren. Personal holiness was regarded in the cloisters as something too high for any apostolic succession to bestow. But the antagonism between the ideal of the cleric and the monk could not last. Largely through the greater worldliness of the Arians, who set to work to persecute monasticism, in part because the influence of Athanasius was thrown on the other side, monasticism became identified with orthodoxy, especially in Egypt. More important still was the support given to monasticism by all the great leaders of the church. In the West, where the consciousness of opposition between the cleric and the monk never became so pronounced as in the East, the influence of Jerome and Augustine on its behalf was decisive.

In the East the dominating principle of monachism was its strongly marked individualism—the protest of the individual against a collectivism which tended to lose sight of his value. Unfortunately the protest became a council of despair and flight, although the element of life which underlay it must not be overlooked. Individualism was self-surrender united in a yearning for ideals which took the form of a flight to the desert. To some extent the reason for this was that the early eastern monks were recruited chiefly from the great cities and not from the villages or from the slave class. Christianity in the fourth century was still mostly centered in the towns, and nowhere was life so hopelessly corrupt and the financial oppression of the middle classes so crushing. This explains the rise in Egypt of the eremite. The influence of stoicism and gnosticism was also significant. The stoics recognized monasticism as the attainment of the ideal of *apatheia*, or the perfect domination of all the influences of nature. In the East

gnosticism had been the great foe against which Christianity had fought for its life. In the theological sense it had been defeated, but in the popular life of the church gnosticism changed its name and triumphed in the more exaggerated forms of monachism. In the West, when St. Augustine succeeded in shaking off a re-statement of gnosticism called Manichaeism, gnosticism never secured more than a temporary hold, except in the later rise of the Cathari or Albigenses; but in the East a defeated gnosticism found refuge in a monachism modeled after its own pattern. Hence the monstrous austerities, for instance of the stylites, or pillar saints, of Syria, and of the *boskoi*, or grazing monks, of Mesopotamia. But the gnostic ideals which so influenced the eastern hermits had little influence in the West. The disdain of the brooding East for the facts of life was an impossibility for the West, upon which Rome had stamped its genius for organization. In the East the dervish still remains the ideal of the renunciant, whether in the Christian, Moslem or Buddhist world. In the West such monks as St. Gregory or St. Bernard are the interpreters of a different ideal.

Eastern monasticism, which began with the hermits of the desert Nitria—the leading spirit among whom was Anthony (died *c.* 356)—soon developed under the influence of Pachomius (died *c.* 346) into a more organized form. Whether Pachomius owed anything to the monks of the great heathen Serapeum is more than doubtful. But after some years as an anchorite he began with three disciples and gathered the hermits of the Thebaid into a congregation of nine monasteries at Tabennisi near Denderah, while his sister Mary organized two cloisters for women, the number of which soon increased to a dozen. Of equal importance was the development in Syria under Basil of Caesarea (*c.* 329–79), who, after withdrawing for a while under the influence of Eustathius of Sebaste to a solitude in Pontus, escaped extravagances and drew up a rule which became basic to Greek and Russian monasticism. It should be noted, however, that this rule did not lead to any social developments but rather found its best expression, altogether static and contemplative, in the collection of unrelated, often inaccessible, monasteries in such places as Mount Athos. The monasticism of the Eastern church, untouched by the influence of Benedict, has to this day remained much as it was in the early centuries and still lies outside the church.

In the West monasticism very soon ceased to

be the monachism of the lonely monk. It took a tribal form in Ireland, with the chief of the tribe or sept as the abbot. Women and children were at first not driven from the monastery, and all individuals in the clan were reckoned as members; "saintship" was practically hereditary. Celtic monasticism failed, however, to emphasize one of the main features of monasticism—stability, the fixed domicile of the monk; and Irish restlessness led to great missionary activities in Gaul, Scotland and northern England, as well as in such remote places as St. Gallen in Switzerland. Organized upon the sept and not upon the diocese, it recognized only the bishop as subordinate to the abbot. In the blood and fire of the Danish invasions Celtic monasticism died away. Its libraries were burned, its educational agencies ruined, and such monasteries as survived became the center of fierce tribal feuds.

Western monasticism in its abiding form was the result of the work of Benedict of Nursia, who about 529 promulgated his famous Rule for the few companions who had gone with him to Monte Cassino. The success of the Rule was not due to any startling novelty. Its virtues were the familiar ones of abstinence, silence, humility and obedience. Chastity was taken for granted and was not even mentioned. A fundamental law was the absolute community of all property. The duties were worship, reading and manual labor—all of them familiar in the precepts of Benedict's predecessor. Benedict's Rule in fact shows a familiarity with the rules of Cassianus of Marseille (c. 360–c. 435), Pachomius and Basil and also that of Shenoudi. Its genius lies in the way in which it incorporates into one organic whole the successes and failures which had preceded it and in accommodating monasticism to European conditions. It is instinct with the Roman genius for organization and solidarity. It was a transition from the uncertain and vague to the reign of law. Instead of lawless individualism and vagrancy it substituted a settled self-sufficient community based on cooperative labor. Henceforth the monk was tied down to a domicile of which the abbot was the father. Hitherto monasticism had dwelt chiefly upon self-conquest; Benedict spoke rather of self-surrender. Instead of reducing food, drink and sleep to a minimum Benedict took care that there was a sufficiency and provided also for warmth and cleanliness. In place of individualism in worship he instituted the familiar common worship and canonical hours.

The social results of Benedict's Rule were incalculable. Previously labor had been looked upon as reserved for slaves, although it is true that Pachomius organized his monasteries on the basis of trades. But Benedict made systematic labor the foundation of his monastic life. Six hours a day were to be devoted to manual toil by each monk. The desert was turned into fertile fields, and the monastery became a center around which there later grew a town. For several centuries Europe witnessed the spectacle of organized monasteries where the individual profited little and the community gained all. Nor was it by accident that the first monk to ascend the papal throne, Gregory the Great, was the real founder of the church's missionary activities. For three hundred years after Gregory the gospel was carried to the lands of the heathen by monks and new monasteries, a religious colonization which brought with it vast social and economic consequences. From the first these missionary colonists looked for support to the papacy rather than to the metropolitans of settled lands. St. Augustine in England, Boniface in Germany, thus helped to found the authority of Rome.

The close connection which for so many centuries existed between the Benedictines and learning was really due to a contemporary of Benedict, Cassiodorus (died c. 580), who endowed the monastery of Vivarium with his own fine library and trained monks to transcribe manuscripts. Cassiodorus must be credited with showing the new monasteries the way to preserve and disseminate such learning and culture as had survived. From the eighth to the eleventh century, especially after the decay of Irish Christianity, the Benedictine schools, like those of Bede at Jarrow, Alcuin at York, Lanfranc and Anselm at Bec, were the educational centers of Europe.

The reforms introduced by Benedict of Nursia which led to the flourishing development of monastic institutions contained within them, however, the seeds of their own destruction. The ideal of work, practised over a long period of years, converted the once lonely and desolate monastery into a prosperous center of wealth and culture. But the monastic aspiration for self-renunciation was defeated by its own labors. Once more ardent spirits sought refuge in the desert as an effort toward that primitive renunciation which was the dream and despair of monasticism during the long centuries of its existence. It is this conflict which was responsible for the various Benedictine reforms and for

the founding of new orders and congregations. The first of these reforms originated with Benedict of Aniane (died c. 821), who at first sought to remedy the situation by a return to the more primitive eastern type of monasticism. Soon, however, he realized that salvation was not of the East. He embraced the Rule of Monte Cassino, brought about its stricter enforcement and sought to establish a renunciation which should express itself in rigid uniformity of food and drink, dress and order of services.

Decay of the monasteries continued, however, and the next great attempt at reform was that of the Cluniac movement. The weakness of the monasteries had lain hitherto in their isolation, each a law unto itself. The Cluniacs introduced a connectional principle and formed congregations under the leadership of Cluny. Thus monasticism passed into the third stage: the evolution of communities into one international organization. But within a hundred years the connectionalism of Cluny resulted in its downfall because of its centralization of wealth and power. From the forty Cluniac dependencies in England alone there was an intolerable drain of gold to Cluny, making the sequestration of these "alien priories" a national necessity. One result of this growth in wealth was the foundation in 1098, by Robert of Molesme and the Englishman Stephen Harding, of Cîteaux, which, however, owed its importance to the entrance of St. Bernard in 1112. Reform was once more sought by a literal observance of the Rule of St. Benedict. With the Cistercians every foundation was an independent abbey and not a subject priory of its parent. But the connectional spirit was kept up by an annual congregation held each September at Cîteaux, with the right of visitation reserved to its abbot. Moreover from the first the Cistercians were independent of all episcopal authority, binding themselves to direct obedience to the pope. They too sought the wilderness and the solitary places, but with their insistence on manual labor they soon amassed great wealth by their improvement of the soil and by their animal breeding. One great result of the Cistercian movement was the development of the wool trade, especially in Yorkshire, by the introduction of superior breeds of sheep. The export of wool by the Cistercian monks became a feature of the commerce of England, while in Burgundy the most famous vineyards came under their control. Their churches were marked by great simplicity of ritual; no rhymed hymns were used and no ornaments were allowed in their architecture.

Although at first the Cistercian colonies were missionary centers which did much to civilize surrounding districts, their farming and commerce led to the association with the monks of an excessive number of lay brethren, especially on the continent. These were inferior persons, often peasants, and their acceptance tended to a class separation which ministered to pride, while the accrued wealth robbed the order of all spiritual power.

For education the Cistercians did nothing. In fact they possessed no schools except those for novices. In the twelfth century the monasteries one by one closed their doors to outsiders and seculars, a course for which they found justification in the rapid rise of the cathedral schools. These more unrestricted schools were of two kinds: the elementary song school, which provided training for the cathedral choir, and the grammar school, which concentrated on Latin and the quadrivium. They fulfilled the double function of educating boys to be administrators and of developing a native priesthood in Latin and elementary theology. From these secular foundations it was but a short step to the higher functions of the new universities, which owed nothing to the monks and to whose spirit they were quite alien.

The Cistercians were the first of the orders bound to the papacy by direct oaths of obedience. The military orders (*q.v.*) arose at the same time. In 1128 St. Bernard assigned to the famous Templars a rule, the greater part of which is by a later hand. About 1120 Raymond de Puy reorganized the Hospitallers of St. John of Jerusalem, the object of which was to keep open the roads to Jerusalem. In 1190 Walpot von Bassenheim, a trader of Bremen, established the order of Teutonic Knights, who in the early thirteenth century forced the heathen Prussians into a reluctant Christianity and led to the Germanization of the Baltic provinces. The establishment of these orders forms a new stage in the evolution of monasticism. In the hermit asceticism was the main thought; in the monastery poverty, celibacy and obedience were the distinctive marks; the military orders anticipated the Jesuits by once more laying stress upon obedience.

Along with the rise of these larger orders there was a return in some quarters to the eremitical methods of the past, as, for example, by the Camaldulians founded by Romuald of Ravenna about 1012; by the Vallombrosians founded in 1038; and, best known although not the most important, by the Carthusians, who in 1084

under the lead of St. Bruno established themselves at Chartreuse. In the Benedictine orders the monk had nothing to do with the lonely cell. He lived in the community of church or cloister. The Carthusians—a modern development is to be found in the Trappists—returned once more to the independence and silence of a congregation of eremites.

The coming of the friars constituted a further development of monasticism; far from shunning men they actually sought them. So different was this new conception of monasticism that the friars were forbidden to enter any monastery. They were forbidden to hold property of any sort; and that which they used was owned by trustees, while they themselves lived by begging. The friars represented largely a town movement; their houses were in the suburbs or slums. Their aim was to fight infidelity of every kind, Cathari and the rest; and in consequence their influence upon the new universities, in which the older monasticism had little place, was remarkable. In the thirteenth and fourteenth centuries they were the intellectual leaders of Europe. But the wave of enthusiasm and culture of which the friars were both cause and result passed the older houses by. In the fourteenth century they neglected even their chronicles and in some cases sold their libraries. By the dawn of the Reformation they had become intellectually stagnant.

Simultaneously with these currents in monasticism came the development of the canons regular. In the sixth and seventh centuries it became the custom in Gaul and Spain for the clergy in a town to live together in the bishop's house, not only for the sake of discipline and concentration of resources but also in order to secure better training of the younger clerics. The members of these communities were called canons, a title originally applied to all who were entered on the church roll as recipients of church funds. The payments which such canons received were called prebends, and were separated from the general funds under the bishop's control. At the close of the eighth century attempts were made to bring the canons into line with the monastic ideal by forcing the clergy to live a common life. The leader in this movement was Chrodegang of Metz (died 766). Moreover in order to assist education one of the canons was designated chancellor or schoolmaster. Chrodegang's rule and its later developments differed in two ways from the Rule of Benedict. Instead of wealth reverting to the common fund, the canons were allowed a life interest in the property and a

share of fees and offerings. Moreover each canon was permitted to have a dwelling of his own and discipline, church services and manual work were not peremptory. Chrodegang's reform was short lived even in the towns. In England the reformers of the tenth century, under St. Dunstan, expelled the canons from nine cathedrals and replaced them by monks. Chrodegang's attempt was revived by Yves of Chartres (c. 1040–1116), who in 1078 introduced into collegiate churches a rule drawn in part from the work of St. Augustine. It is from this rule that these canons received their name of canons of St. Augustine, or Austin canons. Canons were introduced into England in 1107 by Anselm; and from the first, although they renounced private property, they abandoned the negative sides of self-renunciation. They launched into the parish life which centered round their collegiate church; often hospitals were attached to their houses. One congregation of Austin canons, led by St. Bernard of Menthon, founded the hospices of St. Bernard on the passes of the Alps in 962. The continuity of this form of charity is seen in the endeavor to repeat the enterprise in Tibet in 1933. Another congregation of canons regular, the Gilbertines (c. 1130), was the only English order ever founded; a small mixed order, it centered chiefly in Lincolnshire, and its estates, noted for their wool output, were administered by the canons, while the government was in the hands of a committee composed of two canons and two nuns. The Austin canons organized in 1120 by St. Norbert at Prémontré near Laon in France were called Premonstratensians, or white canons. Under the Austin rule they emphasized the connective idea, and a general chapter of the thirty different provinces and the "correctors" at their head was held on the ninth of October annually until 1736 at Prémontré. They were strong among the Wends of Prussia, to whose Christianization they devoted themselves.

Nunneries existed and developed *pari passu* with monasteries, with a regime similar though less intensive and with far inferior resources. In monasteries Latin conversation was compulsory; in nunneries French was permissible. Nunneries often served as boarding schools for wealthier girls and as such survived long after the monasteries had closed their doors to all outsiders, but otherwise they had little social or economic influence. Early English nunneries had one curious feature: many of them were double monasteries, in which the abbess ruled over the men. Such arrangements, whereby a society of regular

priests ministered to the spiritual needs of women, and the necessary association involved were not essentially new. In Pontus St. Basil and his sister Macrina presided over settlements of men and women separated only by the river Iris. Although prohibited in 506 by the Council of Agde in Languedoc as well as by Justinian, the system of double monasteries flourished. Before the advent of the Irish Columban they were numerous in Gaul, while after his arrival some of the largest and most famous developed, although none of them owed their origin to the saint himself. A further impulse to the establishment of double monasteries in Germany was provided by the disciples of Boniface, many of whom had received their training at the double monastery of Wimborne. From the first double monasteries flourished in the Celtic church, probably because these were a survival of the old clan system under which men and women belonged to the same religious community. In Ireland the head of such monasteries was usually a man, as was the head of the clan; but in the Scotch-Irish monasteries of England, especially in those founded by royal princesses, and in Columban's double monasteries in Gaul and Belgium the monastery of clerks or priests at the gates of the nunnery was ruled over by the abbess. This inversion of the normal relationship is probably due to the fact that the original foundation was the nunnery; for the spiritual needs as well as for the oversight of its estates there grew up a smaller dependent monastery of priests and lay brethren. In some double monasteries the monks were in the majority.

The wealth of the monasteries was most unequally distributed; some smaller monasteries were always handicapped by insufficient means. Broadly speaking, monastic wealth consisted of lands or church appropriations. Much of the land, especially that of the older institutions, was acquired as a result of monastic colonizing activities; the rest represented endowments or purchases from needy landlords. Friction developed where a town had grown up around the monastery. Originally a place of refuge, in time the monastery became a landlord more harsh than any baron, if only because it was never driven by death or poverty to sell its irritating feudal rights or to emancipate its serfs. Much of the wealth of the larger monasteries was secured by appropriation of the better livings and by the substitution of a poorly paid "vicar" in place of the "parson." Although from the twelfth century onward bishops in England were careful to

insist that the vicars should have an adequate stipend, the monasteries continued to despoil the secular church by taking the greater tithes for themselves. In England, for instance, where there were over eight thousand parishes, the majority of the wealthier parishes had been appropriated to the monastic foundations by the end of the fourteenth century. Very often the monastery not only appropriated the tithes but closed down the parish church, giving to the parishioners some rights in the nave of their own abbey which at the Dissolution thus escaped destruction. In other cases, where the parish church was appropriated, the chancel became monastic property; and often at the Dissolution it had then to be bought back by the parishioners or else be destroyed. Nevertheless, despite these constant appropriations the finances of the monasteries were often unsound, and for several reasons. As a result of the lesser number of entrants after the Black Death of 1350 and the consequent diminution of what might be called entrance fees, the majority of the monasteries remained only half occupied. Moreover most of the monasteries had been too lavish in the building of their churches, which were often far larger than necessary, and had raised money on interest at rates of 10 percent or even more, paid in wool or other produce. With the collapse after the Black Death of the old systems of farming the interest charges, whether in commodity values or in the new money, coupled with the cost of the monastic church, came to be an intolerable burden. No new monasteries were founded; a cheaper means of obtaining prayers for the dead was found in the endowment of collegiate secular churches and of numerous chantry chapels.

From the twelfth century onward monasteries began rapidly to decay, culminating in England in the Dissolution by Henry VIII. The causes of the Dissolution have been the subject of much controversy, but the idea, at one time so prevalent, that the monasteries were seats of corruption and vice may easily be dismissed. This tale was spread by commissioners of Henry VIII to justify their actions. Wycliffe, the stern opponent of all monasteries, brings no special charge of immorality against the monks of his day. In his view their crime was a self-satisfied lack of spirituality which he looked upon as a religion of fat cows containing nothing to help subdue the flesh. The actual causes for the decline of the monasteries were many. They had ceased to play any part in the educational life of the country

and had discontinued the copying of manuscripts or the writing of chronicles. While at one time they had fulfilled certain social functions, such as providing guest houses for travelers, Wycliffe claimed that the guest houses in many places had been allowed to fall into ruins and that hospitality was restricted to the rich to the neglect of the poor. Further the monasteries had earned the hatred of the secular church by their appropriation of the livings and by the fact that so many monasteries were exempted from the control of the bishop, maintaining that they were "a state within a state" responsible only to the pope. The constant addition of lands had also brought the monasteries into conflict with the state, which found it necessary to pass acts of mortmain and to resort to other means in order to restrict the growth of landed wealth. With this growth of wealth the monasteries had ceased to carry out their rule of labor by their own hands; their farming was now done for them by others on a money basis. Nor must the excessive financial cost of these monastic establishments be overlooked. After 1350 the cost per monk in some of the wealthier monasteries amounted to the equivalent of two thousand dollars a year; at Westminster, Glastonbury and St. Albans it was far more. It was asked whether the monks showed any adequate return for such excessive costs. They were even accused of misusing their charity funds, and there were undoubted illustrations of the diversion of these funds into monastic coffers. The Lollards protested that the monasteries had "almost all lordship amortized in them yet they will not pay tax nor tribute to the King for maintenance of the realm." Thus when the hour of their trial came, they had no friends. The state opposed them because of their position with regard to the payment of taxes. They had long ceased to be democratic and their abbots were too often the nominees of wealthy politicians. Their broad acres had become an object of envy to the new nobility; and they had estranged the secular church by their appropriations and aloofness. The cause of the fall was not so much the positive evil that they wrought—in truth they still performed many social functions—but rather the fact that they had ceased to be a spiritual force and to fulfil the purposes for which they had been founded. They had lost the power of self-denial which had made the orders so great.

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See RELIGIOUS ORDERS; MILITARY ORDERS; CLUNIAN MOVEMENT; FRANCISCAN MOVEMENT; DOMINICAN

FRIARS; JESUITS; RELIGION; RELIGIOUS INSTITUTIONS; PRIESTHOOD; CHRISTIANITY; BUDDHISM; ISLAM; PAPAcy; REFORMATION; ASCETICISM; CELIBACY; COMMUNISM; MISSIONS; EDUCATION; MANORIAL SYSTEM; MORTMAIN.

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MONCADA, SANCHE DE, early seventeenth century Spanish theologian and economist. Moncada attained distinction by his *Restauración política de España* (Madrid 1619; reprinted in 1746), in which in typical mercantilist fashion he diagnosed and prescribed a remedy for Spain's decadent economy. He ascribed the economic decline of Spain to the discovery of the Indies, which in bringing about an abundance of precious metals and a price level higher in Spain than in other countries served to encourage the importation of foreign goods to the detriment of domestic production. The resulting unfavorable

balance of trade, aggravated by the payment of rents, annuities and other remittances to foreign creditors, expressed itself in a drain of precious metals, which not only caused a dearth of means of payment in the country but greatly strengthened the financial and consequently also the military powers of the enemies of Spain and the church. In order to repatriate the treasure Moncada proposed a rigid prohibitive system which should reverse Spain's position as an importer of manufactured goods and an exporter of raw materials, relieve unemployment and stimulate the growth of population. Advocating the death penalty for the exporting of specie and for the importing of foreign manufactures, he recommended the Inquisition as an instrument for enforcing the commercial restrictions. Moncada favored heavy taxation of agriculture, because nature as a source of wealth is "indefatigable"; he urged price fixing for agricultural products, although he doubted the efficacy of fixing the legal prices at a level lower than that of "natural" prices.

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MOND, SIR ALFRED. *See* MELCHETT, LORD.

MONETARY CONFERENCES. *See* MONETARY UNIONS; MONETARY STABILIZATION.

MONETARY STABILIZATION. In its broader usage the term monetary stabilization is synonymous with stabilization of the general price level (*see* PRICE STABILIZATION). In its more restricted meaning, as used in this discussion, the term signifies the fixing of the value of a particularly wayward currency in terms of some less erratic money or merely the elimination of extreme shifts in its purchasing power.

The value of any given currency may be measured either by its command over commodities in the area in which it circulates or by the rate at which it exchanges against other currencies. The rate at which one currency exchanges for another depends, however, upon the purchasing power of the measuring as well as of the measured money. Stable purchasing power of any given monetary unit is therefore compatible with unstable exchange rates. Per contra, exchange rates may be kept stable although the commodity purchasing power of the currencies

concerned is fluctuating; all that is necessary is that the currencies should fluctuate substantially in unison.

With exchange rates accurately reflecting the internal purchasing power of the currencies concerned, there are four possible sets of relationships in respect to stability of any given currency. These are: first, stable internal purchasing power and stable exchange rates—all currencies are stabilized; second, stable internal purchasing power and unstable exchange rates—the measuring currencies are unstable; third, unstable internal purchasing power and stable exchange rates—the measuring currencies are unstable but fluctuations occur in unison with those of the measured currency; and, fourth, unstable internal purchasing power and unstable exchange rates—the measuring currencies may be either stable or unstable and exchange rates will therefore tend to fluctuate in the one case proportionately and in the other disproportionately with the changes in the internal purchasing power of the measured unit. Since there has never been a currency of unvarying purchasing power, neither of the first two possibilities is other than an unattained ideal. The third possibility has been more or less completely realized whenever a given monetary material has become widely established. Prior to the nineteenth century this happened with silver and in the early years of the twentieth century with gold. The intervening transition from silver to gold moreover did not disturb the situation, since bimetallic standards in some important countries had the effect of tying together silver and gold standard moneys at the bimetallic mint ratio and therefore of establishing fixed rates of exchange between all moneys on a gold, silver or bimetallic basis. The problem of monetary stability, in the narrower sense, arises with respect to one or more currencies of the type indicated in the fourth category and resolves itself, in the modern world, into the resumption of the gold standard, or some approximation thereto, as a means of securing some degree of stability in purchasing power, with absolute stability in exchange rates on gold standard countries, and thus of escaping from monetary chaos.

Thoroughgoing currency disorganization rarely occurs in other than inconvertible paper monetary systems, and although it is by no means inevitable in such systems it has as a matter of record usually accompanied them. Perhaps the most outstanding exception is that of the first paper pound from 1797 to 1821, and it may be

said in general that Great Britain has managed inconvertible paper money with rather more circumspection than has been shown by any other country. Properly handled paper currencies might perhaps be the most stable form of money, but so far from having been consciously set up toward that end they have almost always resulted from an undesired lapse from metallic monetary standards. This lapse has ordinarily not been checked short of threatened or realized disaster. Under metallic monetary standards, with or without convertible paper issues, there are physical limits to the possibility of expansion of the currency. In the case of inconvertible paper there are no such objectively imposed restraints and self-restraint has generally proved so inadequate as to have led to monetary disorders sufficient to make metallic standards seem like stability. This was particularly true of most European currencies following the widespread abandonment of the gold standard during the World War. The extreme monetary disorder which came to reign on the continent rendered currency stabilization an urgent necessity for many countries, and it is out of their varied experiences that something like a standard body of doctrine has emerged.

Three principal types of wartime inflation and depreciation may be distinguished. In Great Britain, Holland, Switzerland and the Scandinavian countries inflation and depreciation had not been so great as to make it impracticable to restore the pre-war monetary unit. In France, Italy and Belgium the process had gone so far as to preclude resumption of a gold currency on the old basis and these moneys were stabilized with the unit containing from one seventh to one quarter of the amount of gold in the pre-war standard coins. In Germany, Austria and Poland depreciation was all but infinite, and stabilization was effected by the introduction of new currency units in which the depreciated currency was redeemed at extremely low ratios. The adoption of a new rather than the stabilization of the old unit was, however, a mere matter of accounting convenience. The really significant contrast is between the first group of countries, where revaluation involving the raising of the gold value of the monetary unit to its original status was undertaken, and the second and third groups, where depreciation was accepted and a corresponding devaluation of the monetary unit definitively established.

The return to and maintenance of a full or modified gold standard involves the equation of

inflated paper with world gold price levels. This may be accomplished either by such an alteration of the paper price structure as will bring it into correspondence with gold prices at a pre-determined gold value of the currency unit or by such an alteration of the original gold weight of the currency unit as will sustain the current price level on a gold basis. Stabilization of a depreciated currency at the original gold value of the monetary unit is possible only through a process of deflation and a postponement of final action until prices can be reduced to the requisite level. Whether or not this should be done is a question of ethics, politics and pragmatic sanctions, the latter being in many cases decisive.

Where depreciation has been so great that resumption of the old value of the currency unit would involve an interest burden on the public debt alone, approximating or greatly exceeding the whole prospective national income, devaluation is clearly inevitable. Devaluation, a matter of course in such circumstances, has marked advantages in all. The restoration of the original value of a depreciated currency not only means a prolongation of instability until the final goal is reached, but it brings about that most devastating form of price change—a prolonged fall—with accompanying strain on business and financial institutions and widespread unemployment. Debtors will have secured undeserved gains and creditors incurred undeserved losses as a result of inflation, but the degree of such gains and losses and the individuals to whom they accrue will have been constantly changing during the whole process of depreciation. The losses and gains can therefore not be nullified by an alteration of the value of the currency in the opposite direction. Such an alteration merely establishes a new series of inequities. If there is added the burden of distress which deflation brings in its train, the case for such devaluation as will prevent a great and prolonged fall in prices becomes overwhelming.

It is inevitable, however, that there should arise a struggle between those who will benefit by a higher valuation of the currency, or low prices, and those who will benefit by a lower valuation, or high prices. In the first group is the whole rentier class and, in general, people with fixed money incomes. Since wages are rather more sluggish in their movement than are commodity prices, the interest of the laborer is with the rentier, provided employment can be maintained. If it cannot be so maintained, and during periods of steadily falling prices it never

has been, the interest of the laboring class along with that of the entrepreneur is in higher prices. Higher prices mean lower entrepreneurial costs relative to returns, good profits, active business and little unemployment.

On the whole equity is best served by a devaluation of the gold content of the currency unit in strict proportion to the fall in gold value which has taken place during the period of depreciation. Expediency, however, demands something more. The resumption of a gold basis puts a certain strain upon financial machinery which a valuation somewhat below the level strictly appropriate to the existing scale of prices does much to ease. Such a valuation will for some time maintain the rising price trend on a moderate scale. This not only gives an added fillip to business but reduces the fiscal burden and strengthens financial institutions. The currency value of any stock of gold which the commercial banks may hold is augmented, and the consequent rise in reserve ratios permits the safe extension of the enlarged credits which a rising price level and active business will require. Moreover during the transitional period, in which domestic prices have not yet reached the level appropriate to the comparatively low gold stabilization rate, the ratio of exports to imports will be high. The consequent influx of gold doubly assures success. It should be noted, however, that this gold accrues only because the country is selling its exports at bargain prices while paying a relatively high price for its imports; this may be good tactics so long as gold is urgently needed, but its abuse is costly.

On the combined grounds of equity and expediency the choice of the rate of stabilization should therefore be somewhat but not greatly below the existing value of the currency unit. There are two measures of this value, the price level and the exchange rate. The general principle is to take the lower of the two values thus indicated. To this, however, there is a potential exception. If the exchange value of the currency is extremely depressed relatively to its value as indicated by the price level, it may be worth while to attempt stabilization at a higher figure than the existing exchange rate would seem to warrant. For technical reasons shifts in the exchange rate very frequently exaggerate the alteration in the long run worth of a currency. In the circumstances to which reference has just been made it is therefore probable that the exchange rate can be raised to and maintained at a higher level without compelling a downward

adjustment in the price structure. Such a level would prevent futile injustice to creditors and would do no harm to other interests.

The contrast between the effects of revaluation and those of something more than proportionate devaluation appears in the economic and financial history of Great Britain and France from 1925 onward. The constant tendency of Great Britain to lose gold in this period and the still stronger tendency for France to acquire it are to be explained almost entirely by the fact that Great Britain chose to revalue the pound at a level above that which internal prices indicated as appropriate, while France took the opposite course with the franc. The British were under the necessity of lowering their price level if they were to maintain the chosen status for the pound. They did so, but resistance was so great that this could not be accomplished in adequate degree. The result was successful stabilization in France, while Britain was in the end unable to maintain the gold standard. In addition the rise in the French price level and the fall in the British made for some years of active business in France and for relative stagnation in Great Britain. The British had a special reason for returning to the original valuation of the pound in their large volume of foreign investment expressed in sterling and perhaps also in the prestige which rightly or wrongly was involved in the resumption of the old unit. These advantages, however, were in any case lost when specie payments were again abandoned in 1931.

The specific methods adopted in initiating stabilization programs varied in different countries. The fundamental cause of disorder was the irresponsible issue of paper currency, but its chief manifestations were the advance in internal prices, the rising cost of gold exchange and unbalanced budgets. The derangement was frequently out of all proportion to the original cause—every effect was cumulative—and it was therefore possible to launch the attack on any sector with some prospect of success. Varying circumstances made it desirable or even necessary to select one salient rather than another. Where practicable the best procedure, however, was a substantially simultaneous attack on all fronts limiting the purpose, with respect to the volume of circulating medium, to the checking of any further increase.

In adopting a program of stabilization determination of the precise objective may be left in abeyance during a period preceding the definitive resumption of specie payments. Instead of

taking an immediate decision on the gold content of the currency unit with support of such decision by the acceptance at substantially the announced figure of all bids and offers of the domestic money against gold or gold exchange, it is possible for the authorities to leave the gold content undecided until some approximation to a constant exchange rate issues from the internal stability attained by the cessation of further issues of currency and the balancing of the budget. The advantages of the latter method lie mainly in the fact that its use permits the early stabilization of the more important internal price situation at the expense of a temporarily fluctuating exchange rate. The former method, on the other hand, while securing immediately stable exchanges involves the risk that an inaccurate choice of the stabilization rate will necessitate an unduly large movement in the domestic price level in the necessary process of equation with world gold prices; and, if the rate is set too high, exhaustion of reserves and failure of the stabilization program are a probable result.

A large reserve of gold or foreign exchange, acquired in advance through a foreign loan or otherwise, is useful but not indispensable to stabilization. Out of this reserve any excess of current demand over supply of foreign exchange, at the chosen rate, must be met. If no such reserve can be acquired it is essential that the stabilization rate be set so low as to insure as quickly as possible an excess of foreign currency demand for the newly stabilized money over any probable demand in the opposite direction. Reserves and confidence reciprocally fortify one another. If there is neither confidence nor reserve, the only recourse is to set so low an exchange valuation on the newly stabilized currency that it will strongly discourage the attempt to cash it. Even then restrictions on the demand for gold or foreign exchange may be necessary, although these still further diminish confidence and postpone the advent of thoroughgoing success. In the stabilization of the franc the Bank of France secured a considerable reserve by buying gold and foreign exchange with new paper currency issues and thus, somewhat paradoxically, prepared for stabilization by first increasing the degree of inflation. This policy was shrewd enough, although it involved a lower valuation of the currency than might otherwise have been attained and meant a further exploitation of the holders of that currency or of fixed claims thereto in the interest of the issuing authorities.

Where currencies are highly depreciated, the

internal velocity of circulation of money usually becomes very great. Stabilization is practically certain to reduce it. The result is a demand for a greatly enlarged volume of currency to maintain the price level appropriate to such rate of exchange as may have been chosen in valuation of the currency or, if the exchanges have been left temporarily free, to prevent a disconcertingly rapid rise in the exchange value of the money in question and a fall in prices. In such circumstances the effect of stabilization is to bring about a renewal of the issues of paper currency, the excessive issue of which had been the original cause of disorder. No evil consequences, however, are likely to ensue from this supplementary augmentation of the currency. On the contrary, it greatly facilitates the task of stabilization, since in the case of a governmental issuing authority it gives the fisc some painless revenue and in other cases makes it easy for the banking administration to build up a gold reserve in exchange for the new issues.

Stabilization of the currency is normally followed by a business crisis. Inflation makes for high profits and rapid turnover of goods. Temporary prostration is almost certain when the mounting ratio of commodity prices to costs is checked by stabilization, and the population tends to hold its money rather than to spend it. Provided, however, that the new valuation of the currency unit does not involve a falling price level, the crisis is not likely to be lengthy.

Monetary disorder frequently promotes a "flight from the currency" or, as it is erroneously termed, an export of capital. There is little of that real export of capital which involves the taking of title to future income in exchange for present purchasing power or commodities. What happens is that holders of a disordered currency are ready to part with it at low prices in foreign exchange while buyers will not pay much in foreign exchange for so uncertain a purchase. There is also a reluctance on the part of citizens to transfer accruing foreign balances into the domestic currency. This drives the exchange value of that currency down. When the stabilization process is begun, especially when no fixed exchange rate is yet established, there becomes operative the counter disposition to buy rather than sell a currency which will not fall farther and which may rise or to effect the postponed transfer of foreign balances while the home currency is still cheap. The result is the realization of the anticipated rise in the exchange value of the domestic currency or the placing of an undue

accumulation of foreign exchange in the hands of the note issuing institution, with a corresponding increase in its issue of notes. The perturbation of exchange rates, internal prices or both involves at least a temporary failure of the stabilization process. An early decision as to a definitive rate does something to prevent the dislocation attendant on the form of gambling here involved. On the other hand, government and central banks, once they have decided what the rate is to be, but without announcing it, are in a position to discourage speculators and incidentally to make money. They need only keep silent, selling the domestic currency when it goes above and buying it when it goes below the determined level. Thus they limit the fluctuations and establish de facto exchange stabilization. De facto becomes de jure whenever the authorities put through legislation giving to individuals the right to acquire from or sell to the government or central bank unlimited amounts of the domestic currency at a fixed rate in the standard metal or money.

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See: PRICE STABILIZATION; INFLATION AND DEFLATION; DEVALUATION; RENTENMARK; MONEY; PAPER MONEY; FOREIGN EXCHANGE; CENTRAL BANKING.

Consult: Great Britain, Parliament, House of Commons, Select Committee on the High Price of Gold Bullion, *The Paper Pound of 1797-1821* (1919); Poland, Ministerstwo Skarbu, *Reports Submitted by the Commission of the American Financial Experts Headed by Dr. E. W. Kemmerer* (Warsaw 1926), published also in Polish, 3 vols. (Cracow 1926); Rogers, J. H., *The Process of Inflation in France, 1914-1927*, Social and Economic Studies of Post-war France, vol. ii (New York 1929); Harris, S. E., *Monetary Problems of the British Empire* (New York 1931); Rist, C., *La déflation en pratique* (Paris 1924); Graham, F. D., *Exchange, Prices, and Production in Hyperinflation: Germany 1920-1923* (Princeton 1930); Schacht, H., *Die Stabilisierung der Mark* (Berlin 1927), tr. by R. Butler (London 1927); Heilperin, M. A., *Le problème monétaire d'après-guerre . . .* (Paris 1931); Cassel, Gustav, *Money and Foreign Exchange after 1914* (London 1922); Zolotas, Xénophon, *L'étalon-or en théorie et en pratique* (Paris 1933).

MONETARY UNIONS. A monetary union is an agreement between two or more states to adopt some form of common regulation of their respective currencies. The scope of the agreement may vary from mere legalization of joint circulation of currencies in frontier districts, whereby public offices are enjoined to accept the coins of a neighboring country, to complete transfer of the currency function from one state to another, as when Luxemburg made such

transfer to Belgium, Monaco to France and Lichtenstein to Switzerland. Within these two extremes there are many forms of monetary unions, which may be divided into three categories: first, those in which the parties to the union allow the circulation of all or certain foreign coins at a fixed ratio to the domestic coins; second, those which involve the introduction of a common monetary unit; and, third, those which provide for common coinage and identical imprint.

It is held that the earliest monetary unions were those contracted between the Greek city-states. The best known is the alleged union between the Greek cities in Asia following their emancipation from Spartan rule in 394 B.C., although the inscription on the coins indicates that they may have been issued merely to celebrate the alliance which resulted in victory. In late antiquity and the early Middle Ages the city-state was replaced by large states, which frequently left the task of actual coinage to the local administrations and reserved the function of currency regulation to their respective central authorities; there was thus no need for monetary unions. With the decay of the centralized state in western Europe monetary unions once more became necessary particularly in Germany, where the process of decentralization went further than in other countries of western Europe. Thus during the Middle Ages monetary unions were confined for the most part to Germany, although they existed also among the city-states of northern Italy and in France. Monetary unions between two cities were known in the thirteenth century. Of greater importance, however, and more characteristic of the Middle Ages were the unions set up in the fourteenth century which covered larger areas, as, for example, those in Franconia, Swabia and on the upper Rhine; the last contained seventy-four mints in 1387 and was soon thereafter succeeded by the so-called Rappenmüntzbund, which continued for more than a hundred years. In northern Germany the union established in 1225 between Hamburg and Lübeck and joined by other cities rose and declined in importance with the Hanseatic League. The common purpose underlying the mediaeval monetary unions was the coining of bullion according to a common standard, often also with identical imprint.

After the sixteenth century the German empire attempted to reserve the coining prerogative to itself. It provided for the minting of large silver coins and also laid down the rules govern-

ing the coinage of smaller denominations by the local authorities. Impeded by the 'Thirty Years' War, the efforts of the empire were continued after the war but were again interfered with by the monetary union formed in 1667 by a group of powerful princes in Zina which introduced a monetary standard inferior to that of the empire; the Leipsic union formed in 1690 had a similar effect. It was not until the nineteenth century, when the creation of the German customs union led to the adoption in 1838 of a common monetary unit in all the states which joined the Zollverein, that currency became centralized. There followed the Vienna union of 1857 which made the thaler the common coin of Austria, southern and northern Germany but which was interrupted by the war of 1866. The formation of the new German Empire in 1871 and the adoption of the gold standard in 1871-73 completed the monetary unification of Germany.

While the idea of an international currency was suggested at a comparatively early date and was urged repeatedly from the sixteenth century on, it was not until the middle of the nineteenth century that the growing volume of international economic intercourse brought it within the realm of international action. As the more important countries were on a gold, a silver or a bimetallic standard the need for greater stability of foreign exchanges was strongly felt. In 1850 the French economist Chevalier suggested that the various countries mint a gold coin of identical weight and quality and that a definite rate of exchange be fixed each year between this international coin and the currencies of those countries which were on a silver basis. At this time, however, the idea of a world gold currency was sidetracked on account of the depreciation of gold which set in in the 1850's and which led countries like Belgium and Switzerland, hitherto on a franc standard, to the complete adoption of silver. Moreover the opinion was widely held at the time that the fluctuating market ratio between gold and silver was due to a considerable extent to the changing monetary legislation of the different countries, and that it might be stabilized if the more important states could agree upon the adoption of the double standard. Consequently, on the initiative of Belgium, the Latin monetary union (Union Latine) was set up in 1865 by the countries on the franc standard—France, Belgium, Switzerland and Italy—among which a certain degree of joint circulation of currency had already taken place. But because of the renewed appreciation

of gold in terms of silver, which had reaffirmed the general belief in gold as the leading monetary metal of the future, the three countries last mentioned now expressed a strong desire to base the union exclusively on gold. France, however, still possessing considerable amounts of silver, succeeded in making the double standard the foundation of the union, which was based in all essential respects on the French currency act of 1803, except that gold and silver were given an equal position. The standard coins of the union were the gold 100, 50, 20, 10 and 5-franc coins and the silver 5-franc coin, all of a fineness of 9/10. In addition each country was entitled to coin union silver token money ranging from 2 francs to 20 centimes to an amount of 6 francs per capita; the smaller subsidiary currency remained national, independent of the agreement. In order to secure the circulation of the union currency all public offices were obliged to accept it in payment, although they were not required to accept amounts of foreign subsidiary currency above 100 francs. The union was to remain in force until 1880, and unless renounced at a year's notice was automatically to be renewed for another 15-year period.

The founders of the Latin Union believed that they had laid the basis for what might eventually develop into a world wide monetary union based on a bimetallic currency. The agreement contained provisions enabling any state to join the union. Greece, however, which joined in 1868, was the only country to do so. The failure of other countries to join the union was probably due mainly to the fact that it was not based solely on gold; this was particularly apparent in the International Currency Conference held in Paris in 1867 at the time of the Universal Exhibition. The purpose of this conference was to investigate the principles on which a world union might be established. It was declared that such a union might be based on a franc standard, which should, however, be a gold franc. In the following years it was generally supposed that the gold franc would eventually be made the basis of the world currency; and several countries, notably Austria and Sweden, commenced to coin gold according to the franc standard, establishing a certain ratio between these gold coins and their circulating standard silver currency. Formal negotiations concerning Austria's joining the union with regard to gold currency had been initiated as early as 1867; but it was not until 1871 that a partial

result was secured, when Italy made the Austrian gold coins legal tender, a provision which was extended in 1874 to Belgium. In other countries—the Papal States, Spain, the Balkan countries and some in Central America—the franc standard was introduced; several of these states contemplated joining the union, but none of them ever did so. The influence of the Latin Union was noticeable likewise in other countries which in introducing the gold standard also adopted the fineness of 9/10, although England and a few less important countries maintained a ratio of 916.66 to 1000. The idea of a world currency based on the franc was set aside, however, as a result of the war of 1870-71 and the introduction of the gold standard in Germany and Scandinavia in a form in which the old unit of account was easily convertible into the new one.

In the meantime the Latin Union, which was bimetallic, began to experience considerable difficulties. The depreciation of silver which had set in in the early 1870's imposed a considerable strain on the monetary gold stock of the union countries while it stimulated the coinage of silver 5-franc pieces. In order to prevent the gold from disappearing completely the coining of silver was limited in 1874 and stopped entirely in 1878. Thus the bimetallic standard was transformed into a "limping gold standard." As considerable amounts of silver had already been coined and silver continued to depreciate, the question arose of making silver 5-franc pieces coined by one state and circulating in another state of the union redeemable in gold by the state of issue, a provision which, if enacted, would have amounted to a complete abandonment of the double standard. The problem raised already in 1878 was met in 1885 by the addition of the so-called liquidation clause to the agreement, according to which in case of liquidation of the union each state was required to redeem a certain amount of its silver 5-franc coins circulating in the other countries of the union; special provisions were made with regard to Belgium, where because of its proximity to the London gold market many 5-silver franc coins had been minted.

Equally considerable were the problems concerning the subsidiary currency, particularly in Italy and Greece, both of which had irredeemable paper money and consequently coined only the union token money. As the value of their currencies declined these divisionary coins were exported to the other countries of the union, in

which all public offices were obliged to accept them. Their return proved of little effect, and as early as 1878 the Italian small currency ceased to be legal tender in the other countries; this provision was canceled in 1885, but it reappeared in 1893 and was extended to Greek token money in 1908. The difficulties in this connection were aggravated as the quota of fractional coins per capita allotted to each country had to be increased when several countries complained of a scarcity of small currency. From an early date it was claimed therefore that the subsidiary coinage should be nationalized; that is, that the provisions of the union regarding divisionary money should be repealed.

Still greater obstacles were encountered during the World War, when various members of the union introduced the paper standard. Despite all prohibitions the union money flowed to the country whose currency was least depreciated: in the first period of the war to France and later to other countries, notably Switzerland. Because of the efforts of the banks of issue to hoard gold currency, migration was confined mainly to the silver 5 francs and the smaller coins. Moreover the occupation of Belgium* by the Germans, who introduced their own currency, caused Belgian union currency to move by roundabout ways to the other countries. The rise in the price of silver in the year 1919-20 still further complicated the situation, making it profitable to melt down the silver coins even in the countries with the least depreciated currencies, such as Switzerland. In February, 1920, a conference was initiated by France, at which Switzerland in particular demanded the complete nationalization of the subsidiary currency. Other countries disapproved of limiting the union to this extent, and it was then agreed that France and Switzerland should exchange subsidiary currency, French token money ceasing to be accepted by public offices in Switzerland; at the same time the Swiss quota of fractional coins was increased to 28 francs per capita. Thereafter silver depreciated, so that it became unprofitable to melt down the silver 5-franc coins, which then flowed to Switzerland in large amounts as a result of the further decline of the French currency. As the liquidation clause of 1885 had limited the French obligation to redeem silver 5-franc pieces returned from Switzerland to 60,000,000 francs, this movement caused considerable apprehension in the latter country, especially because it was believed that there were still in existence within the union

2,000,000,000 francs in 5-franc pieces. As a prohibition against their import proved inefficient, Switzerland declared in December, 1920, that neither foreign 5-franc pieces nor Belgian silver token money would be accepted by public offices after March 31, 1921. Having completed the exchange of the circulating foreign coins, Switzerland had accumulated foreign silver 5-franc pieces to the amount of 225,000,000 francs. Since, as a result of the migration of the Belgian union currency to Switzerland, Belgium desired to introduce nickel coins instead of the union token money, another conference was held in 1921, at which the measures taken by Switzerland were approved. Switzerland undertook to use 66,000,000 francs of the accumulated stock of foreign silver 5-franc pieces for coining purposes, while the remainder was redeemed in Swiss francs by the countries of issue over a period of five years. The complete breakdown of the union came with the reorganization of the depreciated currencies. Toward the end of 1925 Belgium announced that it would withdraw from the union on January 1, 1927, thus bringing into question whether the union should remain in existence between the other four members. As they were all eager to return to an orderly monetary system and only Switzerland could do so on the old basis, they preferred to regard the agreement as having expired. Switzerland later reformed its monetary system, so that even in that country the provisions of the union with respect to coinage are no longer in force.

Of entirely different origin was the Scandinavian monetary union, which was created when it became necessary for the Scandinavian countries to adopt the gold standard, particularly after Germany had taken such a step in 1871; an important factor in its inception was the growth of sympathy and fellowship among the Scandinavian nations, as was also the fact that there had been actual circulation of the currency of the other states in the several border regions. The union was established between Sweden and Denmark on May 27, 1873, and joined by Norway in 1875. The krone was chosen as the unit of account, its size being determined with regard to the immediate market ratio between gold and silver in such a way that the monetary units previously used were easily converted into the new unit. The union comprised all subsidiary currency without any limitations upon the volume to be coined in the respective states; it was believed that the accumulation of foreign Scan-

dinavian token money in each country and its remittance against gold would secure a natural relation between the coinage of subsidiary currency in the individual states. It was expected further that the adoption of the gold standard would lead to a circulation of the new standard gold coins, which were more convenient than the heavier silver currency; but the circulation retained the banknotes, and the gold was concentrated in the issuing banks. For the time therefore joint circulation was confined for the most part to the subsidiary currency, as the banknotes were not quoted exactly at par. In 1894, however, the note banks of Norway and Sweden agreed mutually to accept one another's notes at par, and in 1900 Denmark joined this agreement. Still earlier the cooperation between the central banks to which the monetary union gave rise had led to another important step: in order to avoid repeated movements of gold between the countries, the banks agreed in 1885 to open accounts for one another free of interest charges both on the credit and on the debit side. At any time the creditor might demand gold from the debtor to settle the account, and the regulations of note issue were altered so as to include in the gold cover the net credit balances with the other two banks. The monetary integration of the Scandinavian countries was thus complete. Banknotes and token money were circulating at par, and drafts could always be obtained at par. The quotation of exchange rates was discontinued; the three countries became one region with regard to all kinds of payments.

In 1905, however, the agreement of 1885 was renounced by Sweden; the central bank was unable to maintain the buying and selling of drafts free of charge during a period of rapid economic development and a new agreement was reached, authorizing the banks to charge a commission. The Bank of Norway and the Danish National Bank followed this practise after 1910, but as banknotes were still received at par, the commission was obviously constricted within narrow limits; when it was raised to .05 percent, the use of drafts gave way to the shipment of banknotes.

During the World War note redemption was suspended and the export of gold prohibited, including export to the other countries of the union. The agreement between the banks as to mutual acceptance of their notes at par was abandoned, and soon the values of the three currencies came to differ. On the whole—aside from the first period of the war—the currencies

of the Scandinavian countries were less depreciated than those of the belligerent nations which tried to settle their balances of payments through gold shipments. As Scandinavia was thus drawn into the international rise of prices, the three countries introduced in 1916 on Swedish initiative the so-called gold embargo, abolishing both free coining and the obligation of the central bank to buy gold. This, however, did not inaugurate a common monetary policy; as the value of the Swedish krone remained higher than that of the two other currencies, Norway and Denmark felt justified in attempting to nullify the difference in the exchanges by sending gold coins to Sweden, until it was agreed in 1917 that export licenses for gold should not be recommended by any of the banks unless the gold was required by the receiving bank. Thereafter a difference in the value of the currencies could be counteracted only by shipments of token money. A scarcity of subsidiary currency was apparent at an early date, as the commercial blockade made it financially advantageous to melt down the silver and brass coins; consequently amendments to the monetary conventions of 1917 and 1920 authorized coins of iron and nickel. Of a different nature was the lack of fractional coins which developed in Norway and Denmark when the shipping of union token money to Sweden became profitable. As these shipments were continued despite the prohibitions issued, it was agreed in 1924 that each country should be entitled to coin its own token money, which was to be legal tender only within its own frontiers, and that the coining of union token money could be resumed only after formal disavowal of the agreement of 1924. The old union token money was gradually returned and redeemed by Norway and Denmark and these two countries now began to coin their own fractional currency. Swedish subsidiary currency, still being coined according to the provisions of the monetary convention, ceased to be legal tender in the other countries after a certain period, but the importance of this fact did not become apparent of course until their currencies were again at par with Swedish money. Thus the year 1924 meant the abolition of the monetary union with regard to token money.

With regard to gold, the provision of 1917 was repealed; and as the countries returned to the gold standard in its traditional form, the union must be regarded as having been revived as far as gold currency is concerned. But the fact that the Danish National Bank, for example,

was authorized to redeem its notes with coin or bullion at its own discretion created a situation in which the union lost its importance, even if it might be said formally to have continued its existence. Although the three countries were still compelled to coin their gold currency according to the provisions of the convention, the non-circulation of gold currency and the redemption of notes by bullion made this obligation irrelevant. The provisions regarding the selling of drafts and the mutual acceptance of banknotes at par were not revived, although without formal agreement public offices, such as railway stations, in the border districts have accepted token money and banknotes of the other countries in smaller amounts. Toward the end of 1931 the three Scandinavian countries left the gold standard and introduced paper money; thus the practical importance of those remnants of the union which still existed formally was again eliminated, although the union itself has not been formally abrogated.

Monetary unions owe their origin to the desire on the part of certain states to establish a joint circulation of currency as economic relations between such states became more intimate. An additional factor has been the urge to demonstrate through some form of common currency the joint interests of kindred nations. It is possible also that the unions may have reacted favorably upon the economic intercourse between their members, particularly with regard to capital movements; capital is more easily attracted to foreign countries with the same monetary system. Apart from these inducements, however, the question whether a joint circulation of currency is still of importance to a plurality of countries must be answered in the negative. At a time when the economic relationship between countries was confined mainly to the populations of the frontier districts and when consequently payments were made for the most part in the form of coins, monetary unions might have had a direct economic importance. But with a change in the forms of commerce and in the mechanism of foreign payments in modern times, the goal of international monetary organization has come to be a community of payments rather than of currency. This notion was present in the attempts within the Latin Union to create stable rates of exchange by a stabilization of the market ratio between gold and silver. When the same metal, as, for example, gold, is used as the base of the monetary

systems of different countries, this fact in itself guarantees comparatively stable exchange rates, as was shown in the pre-war period. A monetary union could, by creating a common circulation of standard coins, limit still further the distance between the gold points and thus facilitate international payment. It may be asked whether movement in the exchange rates between gold standard countries could not be ruled out entirely, as was the case in the Scandinavian countries after the agreement of 1885; in such instances the single countries might very well retain their individual monetary systems with different units of account. This evidently is the form of an international community of payments, which is essential to international transactions. Especially since the World War the interest in monetary unions therefore has given way to the idea of creating unions of international payments; when a revival of the Scandinavian monetary union has been discussed in recent years, attention has centered in the agreement of 1885.

As early as 1892, at the monetary conference in Brussels, Julius Wolf proposed that gold shipments be avoided by the issue of international banknotes based on gold, to be deposited by the various states in a neutral country. Similarly, in 1907 Luigi Luzzatti advocated a closer cooperation between central banks with a view toward rendering gold movements superfluous by the issue of international certificates; the idea aroused great interest, particularly in the United States, as the crisis of that year had caused considerable gold shipments. Although the World War obviously impeded international cooperation, it gave rise also to the practise of earmarking gold; the regulations of several banks were altered so as to include such gold in the note cover. Since the war many proposals for cooperation between the banks of issue have appeared as a natural consequence of the keen interest in permanent world peace. Some of these proposals have even gone so far as to suggest an international bank of issue, modeled upon the Federal Reserve system. The Genoa Conference in 1922, recommending a return to the gold standard, at the same time pointed out the importance of international cooperation between the central banks; and the committee which had arranged for the conference explicitly proposed that this cooperation should aim at economizing gold and gold shipments by keeping gold balances abroad. These notions were undoubtedly strengthened by the extended ap-

plication of the gold exchange standard, which naturally furthered the idea of gold concentration. Finally, the creation of the Bank of International Settlements in 1930 widened the possibilities of international monetary cooperation. France had proposed that this bank keep its accounts in *gramme d'or*, or *grammor*, in which international payments should be made. The proposal was opposed and it was decided that transfers were to be effected in Swiss francs at par. This, however, is of minor importance. The significant point is that the existence of the bank and the practise of depositing gold in the bank itself or through its intervention in the banks of the leading countries opened up new possibilities of transacting international payments without the expense of shipping gold, thereby reducing the distance between gold points and further narrowing the range of fluctuation of exchanges of gold standard countries. The consistent application of this device may well lead to the establishment of an international community of payments with the currencies of the different countries quoted at par with one another. Whether this is possible is a matter of dispute. Some argue that the movements in exchange rates between par and either the gold export or the gold import points are decisive for the maintenance of a currency because of the speculative buying and selling of foreign exchange to which they give rise, and that this alone enables the central bank to keep definite rates of exchange. Others maintain that the fixed exchange rates would lead to such economic adjustments that fluctuations in the rates would no longer be required. While it is scarcely possible definitely to solve this problem, it may be noted that the gold standard did not break down in normal times despite the increasing international intercourse which narrowed the margin between the gold points.

Within the British Empire some of the dominions, for example, Australia and New Zealand, normally have the same monetary system as the mother country. It was but natural therefore that in the interests of the empire there should be proposals of a common currency for the whole empire. When England abandoned the gold standard in September, 1931, a step which was followed by almost the entire empire, even by those parts with monetary units differing from Great Britain's, the idea of creating a common unit of account was sustained. Several new proposals have recently been brought forward. Some of them aim at the establishment of

a common paper standard which might be joined by other paper standard countries outside the empire, with the idea that this standard should be managed according to new principles, such as stability of the price level. Others have suggested that silver should again be used in the monetary system, while still others propose the creation of an imperial bank, the duty of which should be to maintain stable exchange rates within the empire. Since it was of a very general character the discussion at the Ottawa Conference in 1932 apparently failed to bring these ideas nearer to realization.

AXEL NIELSEN

See: MONEY; BIMETALLISM AND MONOMETALLISM; COINAGE; MONETARY STABILIZATION; CENTRAL BANKING.

Consult: Luschin von Ebengreuth, A., *Allgemeine Münzkunde und Geldgeschichte des Mittelalters und der neueren Zeit* (2nd ed. Munich 1926); Busolt, Georg, *Griechische Staatskunde*, Handbuch der Altertumswissenschaft, sect. iv, pt. i, vol. i, 2 vols. (3rd ed. by H. Swoboda, Munich 1920-26) vol. ii; Jesse, W., *Der wendische Münzverein*, Quellen und Darstellungen zur hansischen Geschichte, n.s., vol. vi (Lübeck 1928); Schwinkowski, W., "Die Reichsmünzreformbestrebungen in den Jahren 1665-1670 und der Vertrag zu Zinna 1667" in *Vierteljahrsschrift für Sozial- und Wirtschaftsgeschichte*, vol. xiv (1918) 1-87; Janssen, Albert E., *Les conventions monétaires* (Paris 1911); Willis, H. P., *A History of the Latin Monetary Union* (Chicago 1901); Chausserie-Laprée, *L'union monétaire latine* (Paris 1911); Egner, E., *Der lateinische Münzbund seit dem Weltkriege*, Probleme des Geld- und Finanzwesens, vol. iv (Leipzig 1925); Kellenberger, E., *Theorie und Praxis des schweizerischen Geld- Bank- und Börsenwesens seit Ausbruch des Weltkrieges (1914-1930)*, vol. i- (Berne 1930-); Russell, Henry B., *International Monetary Conferences* (New York 1898); Nielsen, Axel, *Den skandinaviske møntunion* (Copenhagen 1917); Great Britain, Imperial Economic Conference at Ottawa, 1932, *Appendices to the Summary of Proceedings*, Cmd. 4175 (1932); Agombart, René, *Politique monétaire des états scandinaves depuis 1914 et spécialement du Danemark* (Bar-le-duc 1930); Wolf, Julius, *Das internationale Zahlungswesen*, Veröffentlichungen des mitteleuropäischen Wirtschaftsvereins in Deutschland, vol. xiv (Leipzig 1913); Mendès-France, P., *La banque internationale; contribution à l'étude du problème des États-Unis d'Europe*, Bibliothèque Économique Universelle, no. 2 (Paris 1930).

MONEY

THE NATURE OF MONEY. At the outset of this inquiry a twofold difficulty arises. On the one hand, there are a number of terms in common use, such as money, purchasing power, media of exchange, currency and circulating media, which, although closely related to the present subject matter and largely synonymous in mean-

ing as ordinarily employed, yet reveal sufficient difference of significance to make it desirable to clear up their relations to one another from the standpoint of systematic monetary theory. On the other hand, the connotation of the word money itself in traditional British-American usage is wider than the meaning apparently attached to it by many modern writers. The accepted British-American tradition defines money functionally, assigning to it two primary and two subsidiary functions: to act as a medium of exchange and common denominator of value and to perform the functions of a store of value and standard of deferred payments. The function of acting as a common denominator of value is derived genetically from the other functions, particularly from that of the medium of exchange. Some doubt is thrown upon this traditional derivation of the "unit of account" function from the medium of exchange function by the historical facts available, which suggest that the reverse order of causation is applicable, at least so far as the precious metals themselves are concerned. Whatever the historical facts may be, the emergence of many different categories of media of exchange and the use of instruments of payment of a non-physical kind suggest that in the modern world the prime function which money as such carries out is to act as a denominator of value or unit of account, with money in a physical form performing in addition the functions of a medium of exchange. Money in a modern community thus consists of the various categories of media of exchange, i.e. money embodied in a concretely defined physical form, and of the non-physical means of payment, comprising the conventionally easily transferable bank deposits and similar claims on debtors expressed in terms of the unit of account, which are referred to as purchasing power. The significant characteristic of a medium of exchange is general acceptability, while that of purchasing power is easy transferability. Everything that is acceptable in exchange must necessarily be transferable, but not everything which is easily transferable is generally acceptable. Nor does the view that a deposit in a banking account is purchasing power when easily transferable necessitate acceptance of the view that all bank deposits are available as purchasing power by their owners at any moment of time, that the division into transferable and non-transferable bank deposits is coextensive with the division into demand and time deposits, that only deposits in commercial banks are purchasing

power or that the mass of purchasing power represented by bank deposits has been "created" by the bankers themselves. The dispute as to whether or not bank deposits are money (see Cannan, *Modern Currency*, p. 88-103) is important mainly from the standpoint of the question of the determination of prices. If it is held that bank deposits are substitutes for money and that the invention of banking has greatly reduced the demand which would otherwise exist for money in the shape of media of exchange, the result, so far as the theory of price formulation is concerned, is not markedly different in its ultimate consequences from that arrived at under the more usual formulations. In any case, it must be pointed out that some forms of purchasing power occupy an intermediate position between bank deposits and circulating media, i.e. those forms of media of exchange which are unregulated by the state. Thus McCulloch cites the case of Lancashire, where in the early part of the nineteenth century "the Circulation" consisted in part of Bank of England notes, in part of mercantile bills of exchange, sometimes with an enormous number of endorsements.

Media of exchange in turn may be divided into currency (*q.v.*), i.e. types of money which are subject to some form of public regulation, and other circulating media, which are not so subject, although the fact that they are generally acceptable in exchange necessarily involves tacit consent on the part of the community in which they circulate. The distinction between currency and circulating media is important, not only as throwing some light upon the problem of state intervention in the field of money but as a means of drawing attention to the circumstance that there is a greater number of commodities which serve as circulating media than of those which constitute currency. For the currencies of modern communities consist only of coins made of a very limited number of metals, and notes, whether issued by governments or banks, and circulating media which comprise such species of money but include also more primitive forms of money, where these still serve as media of exchange in various parts of the world; as, for example, the shell money of the Rossel islanders (Armstrong, W. E., in *Economic Journal*, vol. xxxiv, 1924, p. 423-29). The use of metallic and paper instruments is of course dictated by the desire to achieve the highest possible degree of standardization in the interests of general acceptability. The homogeneity, portability, divisibility and durability of

coined money have been too often discussed to need more than mention here; the advantages of paper money are equally obvious: it is much more portable value for value than metallic money, and while it is probably not so economical to issue and to maintain in good condition as metallic money so far as the lower denominations are concerned, it enables the expression of values much higher than those possible in the case of metallic money. As regards purchasing power transferable simply by written order, such as the check, *giro* and *mandat*, its two great advantages are adaptability to individual circumstances so far as the expression of amount is concerned and the protection which such written orders confer against unauthorized appropriation.

All modern media of exchange, whether in the form of paper or of coin, are embodiments of the unit of account or of a multiple or sub-multiple thereof. The place of any particular coin or note in the hierarchy is therefore a question of denomination. But the denomination does not necessarily indicate the material of which the coin is made, whether its face value is greater than its intrinsic content or whether it is convertible into some other coin or species of money at the option of the holder or, finally, whether the species of money in question possesses full, partial or no legal tender. The impression has developed that token coins are necessarily also divisionary coins with limited legal tender and are convertible into other species of full weight, full legal tender coins, which are also embodiments of the unit of account or multiples thereof. Such habitual associations of ideas simply reflect the standardized monetary arrangements of the last century as they existed in every civilized country; they do not correspond to the present situation in a large number of countries where a regime of inconvertible paper money obtains. Divisionary coins are usually token coins and are also usually, although by no means always, legally convertible into some other species of money; alternative arrangements are limitations of amount, with merely customary convertibility at the central bank, as in the British system. It is no longer true, however, that the species of money into which such divisionary coinage is convertible is itself convertible into a precious metal, although paper money of this inconvertible kind may constitute full legal tender in the countries in which it circulates.

THE ORIGIN OF MONEY AND OF MONETARY

WEIGHTS The present day units of account can best be described as historically determined concepts, the existing denominations having in a majority of cases a rationale different from that of the units from which they originated. In the case of currency systems in which the standard is a precious metal, the unit of account is a "real" unit, in the sense that it corresponds to a legally defined weight of the precious metal in question; but in the case of inconvertible currency systems the unit of account is an "ideal" one, in the sense that it does not so correspond, although it may have done so in the past. Both the actual metal which is or was the basis of the unit of account and the particular weight of metal at present or previously represented by the unit have changed in the course of time.

There is general agreement that the invention of coinage (*q.v.*) originated about 700 B.C. in the countries of the eastern Mediterranean; according to some authorities it had an independent origin in China and India. Before this decisive turning point in monetary history, however, the precious metals had served as money in communities with a high standard of economic development, passing not by tale but by weight. The problems of early monetary history are therefore three in number: first, whether in those communities in which the precious metals came to serve as money they took the place of previous standards and media of exchange; secondly, a more general problem, whether primitive economic societies evolved a common denominator of value before they required and utilized a medium of exchange; thirdly, the origin of the systems of weights by which the precious metals, when they began to function as money materials, were measured. The classical view which colors economic thinking on these matters is that the "medium of exchange" function preceded the function of acting as common denominator, or "standard of value." Moreover economic thought is still somewhat dominated by the concept of a single evolutionary strand of development; namely, that which has resulted in the coined money of today. It is certain, however, that in many communities the line of development was different from this: that whatever the relations in point of priority between the medium of exchange and the common denominator of value, the precious metals never served as the money of the community. Some local commodity in universal demand, either for ornamental purposes or because it filled some indispensable need in the local economic life—

shells, furs, salt, pots or hoes—functioned in place of the metals and in some cases became completely conventionalized, as in the case of the Chinese knife money. As regards the priority of the two functions which money is called upon to perform, opinion generally seems to be veering to the view that the difficulties of pure barter were first overcome by the expression of values in terms of some common prized object before that object or any other served as a medium of exchange, and that the qualities which fitted a commodity to serve as a common denominator of value would not necessarily fit it to serve as a good medium of exchange. The medium of exchange had already therefore a relation to the common denominator in its aspect of consumable commodity. Thus it is suggested by Ridgeway that the origin of modern metallic systems is to be found in the existence of an ox unit in a large part of the Eurasian continent. Gold, when it became the medium of exchange, already had a value and the primitive weight units of the precious metals derive from the amount of gold which was equal to the ox value of gold, weighing being first introduced in connection with the precious metals. The weights themselves were not arrived at by any scientific process but by the use of such objects as were available, the seeds of plants taking first place in this category. Because of the conditions of production of both gold and silver it was the former metal which first played a part in the history of money; although the first coins were composed of electrum, a mixture of gold and silver.

THE CLASSIFICATION OF THEORIES OF THE NATURE OF MONEY. Theories relating to the nature of money are numerous. Ludwig von Mises has suggested that one great dividing line between such theories lies in the compatibility of the view which each takes of the nature of money with the facts of an exchange economy; he thus classifies theories of money as "catallactic" and "acatallactic," that is, those which can and those which cannot be fitted into a theory of exchange. This classification is useful in that it illuminates one important aspect of the theory—the purchasing power of money. But it seems better to start from a somewhat different point of view. Even purely "symbolistic" theories of money point to one important characteristic of money—that it acts as a unit of account—and to stress this aspect is not at all equivalent to denying that the necessity for such a unit arises out of the needs of exchange or that the concrete em-

bodiments of the unit possess value. Thus theories of the nature of money can be divided into those which stress the primacy of the medium of exchange function and those which stress the unit of account function; although some of the latter are acatalactic in character, this characteristic is really shared by the old "commodity" view of money which derived its value from its "intrinsic" content and not directly from its functions as a medium. The medium of exchange theories can be divided further into those which regard money as a valuable commodity that for various reasons came to exercise the function of a medium of exchange—the characteristic mid-nineteenth century point of view—and those which derive the value of money from the fact that it was chosen to serve as a medium of exchange—the living tradition of British-American writings on the subject. The unit of account theories again may be similarly classified into those which assert the existence of the value of the concrete embodiments of the unit of account independently of its function as a denominator of value and those which consider money as the objective representative of debts and the legally authorized means of settling them, which derives its value from the quantitative relationship between itself and these debts (claim theories). The latter theories represent a view which is growing in importance and is at present advocated by many recognized authorities (Cassel, Schumpeter, Hawtrey). The state theory of money should be regarded as a third variant of the unit of account theories. To Knapp and his followers money is simply an instrumentality created by the state with which to settle debts; it has no value as such but is merely the symbol or unit by which value (or debts) is expressed. It is easy to exaggerate the importance of differences of opinion as to the nature of money. The overwhelming majority of writers, whether they would describe the "soul of money" as consisting in its being a unit of account or a "claim," or *Anweisung*, or a medium of exchange, would agree that the two really significant questions to be asked about money are, first, whether it possesses value, and if so, what that value is and how it is determined; and, secondly, whether money is an autonomous creation of the exchange economy or whether it must be described in terms of law and political science as an instrument devised by the state and imposed upon economic society from without. It is significant that recent British, and to a lesser extent American, monetary theory has absorbed much of the

terminology, if not of the thought, of the school which is based upon Knapp's state theory of money. Before the subject of monetary systems is approached therefore, it is necessary to inquire into the relationships which may obtain between the state as a legislative and executive mechanism and monetary institutions in the widest sense of the term.

The state can influence the monetary system of a community in a variety of ways. In the first place, all objects which correspond to the popular idea of money are usually issued by the state or their issue is regulated by it. Thus the action of the state is very important as regards those classes of money which in this discussion are described as currency. In the second place, the legislative powers of the state can be invoked, first, to change the unit of account from time to time, e.g. the change from gulden to kronen in Austria-Hungary, from thaler to marks in Germany and the revision of the units in the case of many of the post-war currency restorations; secondly, to determine the legal tender capacity of coins; thirdly, to regulate the terms of contracts upon a change of standard, e.g. upon the transition from a gold to a paper standard and vice versa, including under this head the important but largely overlooked power to construct sliding scales to determine the relative position of debtors and creditors when a currency is being stabilized after a period of rapidly changing prices. In the third place, the state can affect the value of the particular kind of material out of which money can be made by deciding whether it should or should not be used as currency material; there can be no question, for instance, that the general abolition of the gold standard would result in a serious deterioration in the value of gold; and the closing of the mints to the free coinage of silver must have affected the value of silver. Furthermore the state can influence the value of a particular species of money by increasing or decreasing its quantity. But the last point already shows the real limitations upon the powers of the state in the sphere of currency policy. The state cannot, by virtue of its sovereign power, escape the consequences of its own action; the results depend upon the nature of those actions and not upon the fact that it is the state which so acts. It is certainly not true that the state, merely by issuing a coin and declaring it to be "money," can give it a determinate value in terms of goods. Nor is it true that the state can act in an absolutely unhampered way in its choice of mon-

etary material. The fact that the value of a paper currency in periods of inflation falls more rapidly than its quantity increases is merely a special instance of the general truth that money, in order to act as a medium of exchange, must be generally acceptable. If the state attempts to force upon the exchange economy a money which is not acceptable it is likely to fail. In any case the view that the express sanction of the state is necessary before that which is generally recognized as money can come into existence is clearly contrary to the facts. The most that can be said is that in the evolution of monetary institutions the regulatory action of the state has been a most powerful influence, both for good and for evil. But this by no means confirms Knapp's contention that "the soul of money lies, not in its material content, but in the legal system [*Rechtsordnung*] which regulates its use." There may be no such legal system; and where such a system exists, it may be powerless to prevent a fall in the value of money and a consequent decline in its acceptability.

MONETARY SYSTEMS. By a monetary system is meant an organic complex of types of money, the word organic being used to indicate that there are definite relations of value between the individual types which in the aggregate constitute the system. These value relationships have

two aspects: formal and substantive. The formal aspect is provided by the circumstance that each type and kind of money in the system stands in a definite relation to the unit of account, being either a multiple or a submultiple of it. The substantive aspect consists in the fact that there may be at work forces which disturb the practical possibility of realizing these formal relations; the possibility of such realization is part of the problem of the internal parity of a monetary system. The system as a whole may also be confronted, however, by a problem of external parity; that is, of maintaining the value of the unit of account in terms of some external index or standard. The classification of monetary systems turns upon this point, namely, the standards with which such systems may be associated; and it is important to remember that there may be no such objective standard to which is referred the unit of account to which all the types within the system are related. These considerations lead to a formal classification of monetary systems as presented in the following chart. The classification is based upon two criteria: first, whether any arrangement exists by virtue of which the value of that component of the system to which the value of the remaining portions are adjusted is itself linked with some external object; and, second, the method

CLASSIFICATION OF MONETARY SYSTEMS

SUBSIDIARY UNITS LINKED THROUGH THE UNIT OF REFERENCE TO

NO EXTERNAL VALUE	SOME EXTERNAL VALUE			
	ANOTHER CURRENCY	ONE METAL	TWO OR MORE METALS	OBJECTS OTHER THAN METALS
1. Freely issued inconvertible paper standards	3. Exchange standards	4. Metal freely minted into freely exportable and melttable coins (monometallism)	7. Both metals freely minted into exportable and melttable coins, neither being legal tender (parallel currencies)	10. Currencies whose value is managed through limitation of issue (index standards)
2. Pure limping metallic standards		5. Amount of currency limited to assure equivalence of unit of account with the amount of metal it represents (de facto monometallic stabilization)	8. Both metals freely coined, but mint ratio periodically revised	
		6. Currency convertible into metal on demand and in unlimited amounts (metallic exchange standards)	9. Both metals legal tender (bimetallism)	

by which such external linkage occurs. In practice this second distinction is of great importance since slight changes in the method of adjustment will convert one system into another. Thus an inconvertible paper money system becomes convertible into an isometric system without any change in the internal arrangements, through limitation of amount in accordance with the movements of an index number. A parallel standard becomes converted into a bimetallic standard merely by conferring full legal tender quality upon the standard coins. A monetary system in which the value of the unit of account is kept at par with a metal by limitation of amount becomes convertible into the familiar bullion or exchange standards as the unit can be used to acquire legally a fixed weight of metal, and can in turn be acquired by the presentation of the metal to an appropriate institution (conversion office or central bank). In effect, however, each of these various currency systems falls under one of four main heads: free standards; index or isometric standards; monometallic standards; multimetallic standards.

An examination of the various systems, not with regard to their logical or formal relation to one another but from the practical point of view, brings out three questions: the geographical and historical distribution of these systems; the effect upon the value of the precious metals, and upon the systems themselves, of different methods of adjustment; and the rationale of methods of control over the quantity of the media of exchange. The development of the monetary systems during the nineteenth century proceeded in a twofold direction. In Europe the creation of unified national states led to the emergence of relatively few monetary systems, based in general upon the principle of the free and unlimited mintage of gold, with subsidiary silver, nickel and bronze coins limited in amount and with banknotes freely convertible into gold. In this way the concept of the "ideal" monometallic gold standard was gradually evolved; nearly all the currency reforms of that century followed this trend. Even where, as in Austria-Hungary after the reforms of 1892, paper was not legally convertible, gold was freely obtainable; and as the existence of a paper standard was traditionally associated with unbalanced budgets and economic backwardness, financial opinion and economic theory alike were hostile to it. In the colonial world the currency systems gradually tended toward the exchange standard type, but these exchange standards were all

based upon gold. In the course of this almost universal transition a revolution had occurred, the full extent of which is not always appreciated. It involved not only the elimination of silver monometallism over a large part of the world but the practical disappearance of: bimetallic systems; systems in which silver was the standard but in which gold was periodically "re-rated" in terms of the standard metal (the failure adequately to re-rate gold at the beginning of the eighteenth century was the prime cause of Great Britain's transition to a de facto gold standard); and parallel currencies. The revival of the bimetallic agitation after prices began to fall in the 1870's and the preoccupation of economists with the mechanics of this particular form of associating gold and silver have prevented a due appreciation of the diversified character of the systems which were almost universally replaced by gold monometallism. In the course of the change from silver or paper to gold there appeared in certain cases a form of intermediate currency system of great scientific interest in which the value of the currency depended upon the growth of the demand for a predetermined stock. Thus, after the closing of the mints to the free coinage of silver in India, the silver standard was not immediately replaced even by a de facto gold standard; the value of the stock of rupees varied with demand. There was a stage in the history of the German currency reforms when the free coinage of silver was stopped before gold coinage began. The rise in the (silver) value of the Austro-Hungarian and Russian paper currencies of the 1870's also led directly to the closing of the mints to silver, before the gold standard had definitely been introduced. The present position is very different. Over a large part of the world the gold standard has ceased to function in any form (South America, the British Empire, Scandinavian countries). Elsewhere, as in central Europe, it is formally maintained but exchange restrictions and regulation of imports have robbed it of real significance as the instrument for the maintenance of a closely integrated international price and income structure. Even before its collapse the "ideal" gold standard of the nineteenth century gave way, in the years 1925 to 1929, to variants of the exchange standard: gold coin largely ceased to circulate even in the countries where the old gold standard still nominally existed, and elsewhere the external value of the currency was maintained either by sales of bar gold in minimum amounts so large

as to prevent a general demand for it (the British gold bullion standard) or by sales of foreign exchange on gold standard countries as an alternative or complement to the actual release of gold. The free paper standard has ceased to be unpopular, while the gold standard is near bearing the brunt of popular criticism.

Given an effective metallic standard, i.e. free convertibility of metal into coin and of coin into freely exportable and meltable metal, the value of the metal and the coin cannot differ by more than the coinage charge, if any, imposed by the mint. Alternatively, given an effective bullion standard, the value of the metal in the bullion market cannot be less than the price offered by the central bank or conversion office or greater than the selling price for bullion charged by the same authorities. In terms of commodities also, the purchasing power of bullion and the coin made of it and the purchasing power of the currencies for which it is freely salable and freely obtainable must also be the same. But all this is not equivalent to proof that the net effect of different systems, so far as the purchasing power of the metal and of the media of exchange connected therewith is concerned, is the same. Any system which contains a fiduciary element must reduce the value both of the metal and of the currency: the purchasing power of both the metal and the currency will continue to be identical but will be lower than it would otherwise have been. Thus, where coins of the standard metal alone circulate, the purchasing power of the metal and the coins will be higher than where the currency also comprises token coins of baser metals and higher still than where paper money, not fully covered by the standard, is superadded to the system. If the whole world adheres to the same metallic standard, the effect of a change of system by any one country is not likely to be marked; although methods of economizing the metal have the general tendency to lower its value over the whole of the currency area, and vice versa. The ultimate effect of the recent abandonment of the gold standard by so many countries must be to lower the value of gold in the remaining parts of the world; while, other things being equal, a general restoration of the gold standard would cause a rise in the purchasing power of gold, although these effects could be counteracted by increasing gold economy or by an accelerated production from the mines.

The existence of a metallic standard itself affords some protection against overissue, but

the extent to which it does so may be overestimated. The mere linking up of the currency systems of the world with gold does not prevent the value of the currency and of gold from falling, if there is concerted inflation; that is, a common increase in the fiduciary elements of the currencies. Moreover, as the gold discoveries in California, Australia and South Africa showed, there may be dramatic changes in the stock of gold available. The existence of a metallic standard in a single country, given an unchanged metallic supply, would not prevent a drastic rise of prices there, if the rest of the world abandoned the metal in question. As regards any single monetary system, limitation of issue and therefore the avoidance of the danger of depreciation are secured by convertibility of the local currency into the metal, while the danger of appreciation is avoided by the conversion of the metal into the local currency, both appreciation and depreciation being relative to the purchasing power of money elsewhere. But the maintenance of a local metallic reserve is not in itself a means of preventing local depreciation: the metallic reserves maintained against an inconvertible currency exercise no influence on its value, except possibly a psychological one. Reserves are significant only because they enforce restriction of issue, but restriction of issue would keep up the value of the monetary system even if there were no reserves whatever. The value of convertibility lies in the fact that it forces the monetary authority to restrict the total volume of currency, for otherwise it runs the risk of losing its reserves. The function of the reserve is to buy back the local currency and thus to keep up the value of the outstanding amount. In the case of a reserve equal to 100 percent of the outstanding currency, the significant factor is not that the reserve is fully equal to the total volume of currency but that the reserve requirement has limited the growth of the total volume.

Other methods of controlling the fiduciary elements of a currency system are: the fixing of a limit to the total of the fiduciary circulation, as illustrated in the British note issue; the establishment of a minimum ratio below which the reserve cannot fall, as practised in the United States and in most other countries; the maintenance of the metallic reserve at a minimum absolute amount together with a maximum amount of the fiduciary circulation, as proposed by the Macmillan Committee as appropriate to the circumstances of Great Britain; and, finally,

the setting of a limit to the total amount of notes, covered and uncovered, which can be issued but allowing the reserve to vary freely, as exemplified by the pre-war French system. The preoccupation of legislators with the question of permitting elasticity to the fiduciary portion of the note issue, as evidenced in the provision in the charters of so many central banks for a reduction of the reserve below the statutory ratio on payment of a tax on the excess, has prevented a due appreciation of the vital fact that the absolute size of the reserve is much less important than the due limitation of the total available means of circulation within the community.

THE PURCHASING POWER OF MONEY. Any theory purporting to deal with the problems of money must confront the question of whether money possesses any value and, if it does, how its value is determined. It is of course possible to assert that as money is only a symbol it cannot possess the attribute of value, although even this assertion leaves open the question as to whether the physical embodiments of the symbol possess value. Inquiries into the purchasing power of money are themselves not free from ambiguity unless they distinguish between the reasons why money possesses value at all, the measurement of that value and the conditions which cause that value to change from time to time. The first question has received relatively little attention in Anglo-American monetary literature. It has been usual to point to the fact that the value of money is derivative: "money as such has no utility except what is derived from its exchange-value, that is to say from the utility of the things which it can buy" (Keynes, *Monetary Reform*, p. 82); Irving Fisher's statement that the quantity theory rests ultimately upon the "fundamental peculiarity . . ." that money "has no power to satisfy human wants except a power to purchase things which do have such power" (*Purchasing Power of Money*, p. 32). Nevertheless, even if the value of money be supposed to be purely derivative, the statement is not adequate as it does not sufficiently differentiate money from other instrumental or intermediate products, such as machine tools, whose exchange value rests also upon their power to furnish their owners with things capable of satisfying human wants, although they cannot do so directly. There is, however, general agreement that the value of money is measured by its de facto command over goods and services and that changes in such exchange value can be

stated most easily in the form of index numbers, which, as they express alterations in the level of prices, reveal the reciprocal of changes in the purchasing power of money. But there is now no agreement as to the best method of formulating the causes which alter the purchasing power of money from time to time. This was not the case before the revival of monetary controversy during and especially after the World War. In English speaking countries at least, a single theory of the causes determining changes in the purchasing power of money—the quantity theory—dominated the field. Marshall's attempt to restate the problem of variations in purchasing power in terms of a varying desire to hold money did not weaken the grip of the quantity theory and Friedrich von Wieser's attempt to state the same problem in terms of changes in the volume of money income also failed to attract attention at the time. It is formulations of this kind which attract most attention today, and the reason for the change must be sought in the circumstance that the quantity theory does not fit as easily as these newer theories into a marginalist analysis of exchange value.

The quantity theory, in its barest form, is the application to the field of monetary theory of the supply and demand explanation of prices: quantities of money are contrasted with quantities of goods. It is true that the precise formulation of the quantity theory allows for the fact that the same unit of money may figure in more than one transaction and that the same unit of goods may constitute the content of more than one sale; hence the introduction of a multiplying factor on both sides of the account—the "velocity of circulation" of both goods and money. This refinement is, however, no more than an elaboration of what is essentially a supply and demand explanation of price. Moreover, just as the general theory of supply and demand is closely associated historically with cost of production theories, so the quantity theory can fit in easily with an explanation of changes in the value of money resting ultimately upon the concept of the cost of production (whether real, labor or money cost) of the material of which money is made. In the nineteenth century, when metallic standards prevailed generally, the difficulty of applying a cost of production theory to inconvertible paper money in any realistic way was not an insuperable obstacle to the acceptance of the cost of production point of view.

It was inevitable that, sooner or later, the

marginalist analysis of value should be applied to the case of money, and that with it there should come a critical reexamination of the view that the elasticity of demand for money is always unity and consequently that prices are always directly proportional to the quantity of money. But the marginalist view meets with one preliminary difficulty. In the case of commodities it is clear that the market value of the commodity depends ultimately upon the significance of the commodity to the consumer: objective values flow from the subjective estimates of individuals. It has, however, been urged against the application of marginalist theories of value to the case of money that what is true of commodities in general is not true of money, for the estimates put upon money by individuals depend upon rather than determine its objective value. Unless money possessed purchasing power, individuals would have no reason to hold it: the logical sequence is thus from objective value to subjective value, and not, as in other cases, from subjective to objective. Considerations of this kind have led some writers to hold that "money is a third category, in addition to consumption goods and capital goods," because marginalism is true of commodities but is not true of money. This line of argument is merely a restatement of the Fisher-Keynes point of view already mentioned. One method of meeting the objection is that employed by von Mises in his attempt to explain how money acquired any objective value. In detail his argument is based upon the principle of historical regression: although at any given moment one must assume that money has some purchasing power (objective value), yet "this value which has to be assumed is not the same as the value which we have to explain; it is the exchange value of yesterday, while it is our task to explain the exchange value of today. The objective exchange value of money which exists on the market today is formed out of yesterday's market value under the influence of subjective estimates of the frequenters of the market, as that of yesterday arose out of the play of subjective estimates round the objective value of the day before yesterday, and so on. If we go back continually in this way, we necessarily reach a point where we no longer find in the objective value of money any component which arose out of such valuations as are connected with the functions of money as the universal medium of exchange, where the value of money is nothing more than the value of an immediately useful object. This

point is not a mere conceptual aid to theory; it existed in economic evolution at the precise moment when indirect exchange arose" (*Theorie des Geldes*, p. 100-01).

It is now possible to classify the various theories concerning the causes that determine the changes in the purchasing power of money. They fall into three main groups: cost theories, which may be subdivided into cost of production and labor cost theories; quantity theories, which may be further divided into those derived from supply and demand theories of value and those attributing to money a position as a special economic category with unit elasticity of demand; and the marginalist theories. The last group comprises the cash balance or holding theories as represented by von Mises, Marshall, Cannan and Pigou; the income theories held by von Wieser, Hawtrey and Aftalion; income theories with eclectic elements as represented by Keynes; and, finally, theories based upon eclectic views of price as held by Cassel.

It has become customary to express in algebraic form the relations between the various magnitudes involved in the determination of the purchasing power of money. Such a formal expression is useful in so far as the operative factors regarded as significant are clearly stated thereby; but such an "equation of exchange" is nothing but a summary of the logical basis of a particular point of view and does not prove that that point of view is itself correct. The quantity theory, in the shape given to it by Irving Fisher, its foremost representative, is stated algebraically thus:

$$MV + M'V' = \sum pQ$$

or $MV + M'V' = PT$, from which

$$P = \frac{MV + M'V'}{T}$$

M and M' are the quantities of hand to hand currency and V and V' their respective velocities of circulation; P is the price level and T the volume of transactions. The price level is regarded as directly proportional to changes in the volume of money and of velocity and as inversely proportional to changes in the volume of transactions. Fisher, however, regards his formulation as being strictly true only of so-called "normal periods" and, while in general the various factors are regarded as independent variables, a change in T may bring about changes in V and V' , so that the effect of changes of T upon the price level is not predictable. The in-

come theory of prices has been given an algebraic formulation by Hawtrey; the significant magnitudes are: "consumers' income" expressed in terms of money; "consumers' outlay" similarly expressed; "the unspent margin," the net difference between income and outlay; and changes in output (including finished capital goods). If B represents consumers' income, b and b' an increase in consumers' income and outlay respectively, X production and x and x' an increase in production and consumption respectively, P the level of prices and p an increase of prices, then:

$$(B + b) = (P + p)(X + x)$$

$$(B + b') = (P + p)(X + x'),$$

so that: $b - b' = (P + p)(x - x')$,

from which: $P + p = \frac{b - b'}{x - x'}$.

The cash balance or holding theories may be illustrated from the formulations given by Pigou and by Keynes (although the latter has now advanced from his original position):

$$P = \frac{kR}{M} \quad \text{or}$$

$$P = \frac{kR}{M} \left[c + h(1 - c) \right].$$

In Pigou's formulation R stands for total resources accruing to a society in a given period of time, k for the proportion of these resources which individuals choose to hold in a liquid form and M for the quantity of money. The expanded formula takes account of the distribution of this unspent margin between "cash" and "credit balances," c being the proportion kept by the public in cash, and h the proportion of bankers' cash to their deposits. Keynes' original formula, as he himself points out, is only a derivative of the above "Cambridge" equation: $n = p(k + rk')$, "where n is the total quantity of cash, r the proportion of the banks' cash reserves to their deposits, and p the price of a consumption unit," k and k' being the volume of reserves which the public desires to hold in a liquid form, either in cash or in bank deposits.

It is possible to criticize various theories of the purchasing power of money on two distinct grounds: first, that they may be based upon an inadequate conception of what is meant by the purchasing power of money and, secondly, that they fail to reveal what are the really important

causal factors determining purchasing power however it be defined. Thus it has long been urged against the quantity theory, particularly by continental writers, that it is purely mechanistic: it really states that changes in the volume of money bring about alterations in the price level, but it does not explain the phenomenon. It is the great merit both of the cash balance theories and of the income theories that they bring into the foreground the causal elements involved: a change in the desire to hold money may bring about a change in the price level even without any change in the supply of means of payment; alternatively, an increase in the stream of money income will have a greater or lesser effect upon the level of prices according to whether the increased money resources placed at the disposal of consumers result in additional expenditure, i.e. increased "consumers' outlay," or whether they are added to the "unspent margin," i.e. are neutralized because of the desire of the public to hold larger balances. It is, however, necessary to supply in detail the reasons why it is desirable to hold larger or smaller balances at one time or another, and to explain how an increase in the stream of money income can take place. But, given a fixed supply of means of payment, increased outlay simply means a diminished average balance, while an increase in the average balance involves a diminution of outlay. An increase in the volume of means of payment is due either to increased borrowing by the business community or increased (uncovered) expenditure by governments. It is clear that it is easy to pass from one theory to the other; the general idea is the same, although the emphasis is different.

The latest formulation of the problem by J. M. Keynes is intended as an attack upon prevailing theories from two angles. Keynes believes that the indices hitherto employed to measure the purchasing power of money do not in fact do so; he proposes that the term "purchasing power of money" be henceforth confined to designating the command of money over "all the items which enter into final consumption" and that the index number representing this command be "weighted in proportion to the amount of their money-income which the consuming public devote to them" (*Treatise on Money*, vol. i, p. 57). As regards the forces which determine the command over money, either over consumption goods or over output in general, Keynes draws attention to the influence exerted by a failure of the volume of money savings to

correspond at all times to the volume of new real investment, by which he understands the net addition during a given period of time to the capital wealth of the community. His "fundamental equations" thus link up prices (whether of consumption goods or of output as a whole) with four terms: the money earnings of the community, i.e. cost of production; the output; the volume of money savings and the cost of new investment (in the case of the price level of consumption goods) or the value of new investment (in the case of output as a whole). Where money savings equal cost of new investment or value of investment respectively, the price level will be determined simply by earnings in relation to output. Now earnings and output very closely resemble Hawtrey's income and production and the significance of the new doctrine turns largely upon the importance of this factor: the relation between savings and investment. The causes which lead to a divergence between the two must be sought outside the terms included in the fundamental equation, as must also the causes which lead to variations in earnings and output, in so far as changes in these factors are not caused by changes in savings and investment.

MONETARY PROBLEMS OF THE PRESENT TIME. The accretion of economic knowledge and of administrative experience has apparently disposed forever of some of the problems of money which in the past have caused much trouble. The issue of media of exchange is almost everywhere in the hands of the central government and the central bank and, where the right of banknote issue is retained by commercial banks, it is safeguarded by the law. The issue of subsidiary and divisionary currency no longer presents difficulty, now that it is understood that limitation of issue and legal or de facto convertibility are necessary to prevent overissue. The number of independent currency authorities, although it has increased since the World War, is much smaller than during the greater part of monetary history and attempts to profit at the expense of the public by petty misconduct in the administration of the currency belong to a bygone age. On the other hand, no agreement exists on matters of even greater moment; in the modern world the monetary problems awaiting solution concern both the nature of the monetary standard and the objectives of monetary policy. While these matters are related, they are not coincident. The question of monetary standards is to a large extent influenced by

the desire for economic self-determination irrespective of monetary ends; and the disputed ideal of stabilization is not necessarily dependent upon the choice of any particular monetary standard, provided there is general agreement upon the end to be pursued.

The general trend of events during the fifty years before the war was toward the internationalization of the gold standard. Such a development accorded well with the immense growth of international trade and finance which characterized the period. After 1896 it was not inconsistent with a gradual rise in the world level of prices and was thus not unpopular with the business classes; its ever growing extension was in itself a justification for adherence to it. Moreover an international standard imposes limits upon the wilful maladministration of the monetary system by any single country—the price paid is the loss of reserves and a fall in the external and sooner or later in the internal value of the currency. In a period in which the moral position of the creditor and of creditor nations was much stronger than it is today, adherence to such an international standard was almost obligatory upon countries which desired to borrow freely from the great money markets. These lessons of the nineteenth century seemed to be reenforced by the experiences of the period 1914 to 1925. The destruction of the international standard was accompanied by the conscious use of the printing press as an instrument of governmental finance, and the inflation which ensued resulted in the destruction of the rentier and middle classes over a large part of Europe. In the end the rapid depreciation of the currencies concerned deprived even the governments desirous of profiting from the wiping out of debt, as well as the entrepreneurs who exploited the facts of the situation, of any desire to continue the inflationary policy. The result of the inflationist debauch was the almost universal reintroduction of the gold standard in the years 1925 to 1929. In the short run this policy was undoubtedly successful. The restoration of the international gold standard accompanied, if it did not cause, a marked upswing in world production and trade and was one of the conditions basic to the great growth in the volume of international lending which characterized those years. The collapse of the world boom, particularly the collapse in the United States, destroyed the recreated gold standard and forced a reconsideration of its merits and demerits. Because of the appalling distress occasioned by the fall in

the value of money, the fact was overlooked that the monetary standard was capable of being threatened from another flank; in other words, too great pressure upon the debtor class in times of falling prices would be equally likely to upset belief in the virtues of the standard.

From the standpoint of any single currency area, an independent paper standard has the advantage in that it enables the area in question to overcome the problem of a rigid level of costs more easily than it could with a fixed exchange; for however rigid the cost level may be, a further fall in the rate of exchange will enable it to sell its products in competition with the countries whose cost structure is more elastic. Again, the presence of an independent paper standard removes most of the difficulties associated with the concept of an "unbalanced" balance of payments. A falling exchange will check imports and encourage exports—although how far the exchange will fall in order to bring about the adjustment will depend upon the relative elasticity of the demand for imports and exports respectively. Thus the risk is that the fall in exchange may have to be so great as to cause a sharp rise in the internal level of costs, as a result of the increased cost of imports; and a sharply falling exchange may create distrust in the future of the currency, thus setting up a cumulative tendency to a further fall and inducing a "flight from the currency" which may prove very difficult to manage. An independent paper standard, however, does not itself solve the problem of the price policy to be pursued in so far as the level of prices is regarded as dependent upon currency management. What an independent standard does in this regard is to make an independent policy possible. Thus the aim is to stabilize the internal price level; the fact that the exchange is flexible is a condition of success at a time of falling world prices. The rise in the cost of imported commodities must be allowed for by a slight lowering of the price level of domestic products, but the policy is not dependent upon the good will or the cooperation of other currency authorities.

The dangers which the universal adoption of independent standards involves are that such a step would encourage the already strong tendencies toward economic nationalism; that it would bring about perpetually fluctuating rates of exchange; and that it would at any moment of difficulty facilitate the abuse of the printing press by governments. These dangers could in part be avoided if there were general agreement

to peg paper rates of exchange on, for example, London and New York, and if these centers were to pursue a currency policy approved by the rest of the world. Such an outcome of the present situation is not very likely; but it is possible, although not probable, that a common policy may evolve for the area at present either directly upon the pound sterling or with the exchange rates more or less pegged to sterling. The difficulty is that the forces which have driven so many raw material states off gold may encourage a further decline in their exchange rates. But the vitally important point is that the existence of universal paper standards threatens an indefinite continuance of chaos in the monetary affairs of the world unless agreement is reached as to general price policy. But such an agreement would make an international adoption of paper unnecessary, for the same ends could then be reached under an international gold standard. Even if this were impossible, it would not follow that the gold standard is the less preferable, for adherence to it would at least solve the problem of fixity of exchange.

That the gold standard does not guarantee stability of prices is clear from the whole history of the later nineteenth and the earlier twentieth century, a period not complicated by the extraneous factors present since the World War. It is no part of the case for the gold standard that it of necessity guarantees such stability. Putting the point somewhat differently it must be asked, first, whether stability of prices is the right objective of monetary policy and whether, if it is, the gold standard is an insuperable obstacle to its attainment; second, whether, if some kind of instability of prices does not constitute an obstacle, the gold standard can be so worked as to prevent instabilities of the kind still deemed undesirable; and, finally, whether, even if the kind of instability accompanying the gold standard falls outside the category deemed desirable, its net effects are preferable to those which may ensue from any alternative likely to be adopted.

In the opinion of the writer, there is no reason to suppose that absolute stability of the level of prices, whether wholesale or retail, should be the aim of currency policy. The tendency of increasing productivity should be in the direction of falling prices; and provided that prices do not fall at a rate greater than productivity increases, there is no reason to fear that industrial depression or unemployment will follow. It is not impossible, however, so to work the gold standard as to provide a stable level of

world prices, if this is desired. That prices have fallen in the years 1930 to 1932 to a level far below the point which increasing technical knowledge would justify is clear from the continuance of the depression which set in in 1929; as a result, the burden of interest charges combined with the rigidity of costs has forced the greater part of the world off the gold standard. But it is by no means true that the extent of the fall is a direct consequence of the existence of the gold standard. To prevent a fall of prices of this magnitude it is necessary to prevent a boom of the previous magnitude. The prevention of boom conditions is not, as the world now knows to its cost, a matter of watching the level of prices. The experience of the United States in the period from 1925 to 1929 has shown that a quite remarkable stability in the level of wholesale prices is consistent with the development of underlying conditions which eventuate in a depression of the gravest kind. The prevention of booms is a much more complex task, and there is no ground whatever for the supposition that such a task is inherently less difficult under a regime of paper than of gold.

It is true that there are present in the post-war world elements of friction which do not spring from the existence of the gold standard but which can undoubtedly hamper its working. Costs are more rigid than they were because of the growth in the power of trade unions and trade monopolies of many kinds. The volume of fixed interest bearing debt has greatly expanded and the rights of creditors are less tenderly regarded; the international financial mechanism is being exposed to a new force in the shape of an immensely swollen international short loan fund. These extraneous factors undoubtedly hamper the work of adjustment, once the mechanism is allowed to get out of gear. A successful working of the gold standard thus involves to a greater extent than before the war the use of the power of central banks to prevent the development of credit conditions in periods of upswing which will make the depression, when it comes, more deep seated than need be the case if earlier action is taken. The solution of the problem of controlling cyclical variations is, however, common both to the gold standard and to the paper standard. If gold is to be preferred on other grounds, the problem of controlling cyclical fluctuations constitutes no definite and final objection to the restoration of gold.

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See: FINANCIAL ORGANIZATION; CURRENCY; COINAGE;

PAPER MONEY; GOLD; METALS; BIMETALLISM AND MONOMETALLISM; CREDIT; BANKNOTES; ASSIGNATS; BILLS OF CREDIT; BANK DEPOSITS, GUARANTY OF; CHECK; MONEY MARKET; CALL MONEY; FOREIGN EXCHANGE; AGIO; MONETARY UNIONS; MONETARY STABILIZATION; PRICE STABILIZATION; COMPENSATED DOLLAR; CENTRAL BANKING; CREDIT CONTROL; INFLATION AND DEFLATION; DEVALUATION; INDEX NUMBERS; VALUE AND PRICE; BULLIONISTS.

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MONEY MARKET. A money market presents the aggregate of facilities through which short term funds are loaned and borrowed and through

which a large part of the financial transactions of the country or of the world are cleared. It is a center where money seeking temporary investment is accumulated and made available to members of the business and financial community who desire short term accommodation. Conceived broadly a money market includes the entire mechanism employed in financing business of all types. In the narrower sense in which the term is generally used, however, it covers only dealings in more or less standardized types of highly liquid loans, such as call loans, and credit instruments, such as acceptances and treasury bills, in which personal relations between lender and borrower are of negligible importance. In this sense the money market is distinct from and supplementary to the commercial banking system. The standardized forms of short term investment are provided by the acceptance market, the commercial paper market, the short term treasury bill market and the call money market. The commercial paper and the acceptance markets utilize these short term funds for the purpose of financing domestic and foreign trade. The short term government security market employs the funds to finance the operations of the government, while the call money market is used exclusively to facilitate marginal trading on securities already outstanding in the market or to facilitate the issue of new securities before they have reached the ultimate investor. The money market thus consists of a number of divisions and subdivisions, each devoted to a particular type of credit operation and each constituting a separate market in itself, although the various separate markets are closely interrelated and mutually affect each other.

Although a distinction may be made between the money market dealing primarily in short term credit transactions and the capital market engaged in financing the long term capital requirements through the sale of securities and bonds, in practise the two are very closely related and transactions originating in one market are often completed in the other. Capital transactions, such as the flotation of securities, are frequently financed by means of short term loans obtained in the money market; and payments of interest and dividends on securities, although they originate in capital transactions, have the same effect on the money market as the redemption of commercial paper or the paying of outstanding acceptances. On the other hand, short term loans are often obtained in the money market in anticipation of the sale of securities in

the capital market and are liquidated out of the proceeds of a long term capital transaction. Similarly, trading in securities already outstanding, particularly margin trading, depends almost exclusively upon short term credit obtained by the brokers from the banks. There is also a very close connection between the money market proper and related markets, such as the commodity markets, the foreign exchange markets and the shipping and insurance markets. It is these related markets which provide the opportunities for investment of the funds in the money market; the demand for funds arises from these sources. Thus, for example, the position of London as perhaps the most important international money market in the world is due to the fact that London has been for decades the world's greatest capital market, the center for world trade in staple commodities and perhaps the greatest shipping and insurance center. All these activities require short term financing, and it is on the basis of this demand that the London money market has developed to its present status.

Since the principal money markets have developed in response to the credit needs of the respective economic regions, the structure and operation of such markets vary from country to country. For example, in New York up to 1930 the call money market was dominant, while London, for a long time the center in financing international trade, developed the acceptance market as the principal subdivision of the general money market. In post-war years, however, important changes have taken place in the London market, and today the treasury bill market rivals the acceptance market in importance. In continental European financial centers, such as Paris and Berlin, trade bills arising out of domestic commercial transactions and bearing two or three signatures have been and still are the most important instrument of the money market.

While it is impossible clearly to distinguish between borrowers and lenders, since an institution may at one time be a borrower and at another time a lender, the following classification indicates the usual position of the chief types of institutions. On the lenders' side the most important institutions are the central bank, commercial banks and business enterprise. The central bank is the ultimate source of credit. In the United States the credit of the Federal Reserve Banks, except under provision of recent emergency legislation, is extended only to the member banks. The Bank of England is free to

do business with anyone, but as a matter of fact it deals chiefly with the bill brokers and joint stock banks. In contrast, however, to the United States, where the Federal Reserve Banks extend credit directly to the member banks, in London the joint stock banks almost never borrow directly from the Bank of England and the influence of the central bank is exercised through the bill brokers. Whenever the joint stock banks are confronted with an increased demand for cash they call their loans from the bill brokers, thereby forcing the latter to borrow from the Bank of England. On the continent the central banks usually conduct a general banking business and deal with the public as well as with banks through a more or less extensive system of branch offices. In some countries, particularly France and Belgium, the central banks deal more with individuals than with banks.

The commercial banks constitute the most important single class of lenders. In the United States they occasionally appear as borrowers of federal funds or sell bankers' acceptances to the Federal Reserve Banks. The manner in which the commercial banks place funds at the disposal of the money market differs in various countries. In the United States before the World War the call market and to a lesser extent the commercial paper market were considered as the most important outlets for short term funds. During the post-war period the development of the acceptance market has provided a new medium of short term investment and still more recently short term treasury bills and notes have become the most important outlet for bankers' short term funds. In England the joint stock banks put funds in the money market chiefly in the form of loans to bill brokers and discount houses, but also by purchase of acceptances and treasury bills. On the continent the chief outlet for funds of commercial banks consists in the purchase of trade bills bearing two signatures. Upon the endorsement of such bills by the banks they become eligible for discount at the central bank.

Business enterprises, such as great corporations and particularly insurance companies, often appear as large lenders of money. During the stock market boom in 1928 and 1929 several billions of dollars of such funds were loaned on call to brokers and dealers in New York through the agency of the commercial banks. Since the latter part of 1931, however, the large New York banks have refused to make loans "for the account of others," and the amount now outstand-

ing is insignificant. In London the surplus funds of the big corporations and insurance companies are often used for the purchase of acceptances and thereby create a continuous demand for such credit instruments. In post-war years the use of treasury bills has to some extent replaced the use of bankers' acceptances.

The borrowers in the money market comprise stockbrokers, bill brokers, investment houses and the government treasury. In the New York money market the stockbrokers constitute the most important group of borrowers in normal times, while in London the chief borrowers are the bill brokers, or dealers in bankers' acceptances and treasury bills. This perhaps more than anything else indicates the fundamental difference between the London and New York money markets. In London the bill brokers borrow money on call or on short notice from the joint stock banks and purchase bankers' acceptances with the proceeds of these loans. Their profit consists in the difference in the rate of interest which they pay to the joint stock banks and the rate on prime bankers' bills. The loans obtained from the joint stock banks are secured either by treasury bills, bankers' acceptances or, to a much lesser extent, by long term government bonds. In New York the stockbrokers borrow from the banks, pledging stocks or bonds as collateral, for the purpose of financing the purchase of securities on margin. The loans may be payable on call or may be contracted for a definite period of time, usually thirty to ninety days. In London the rate on loans at call or short notice which the bill brokers obtain from the joint stock banks stands in a definite relationship to the discount rate of the Bank of England; the former can never go above the latter as the bill brokers have recourse to the Bank of England, which stands ready to discount their acceptances at the official discount rate. In New York, on the other hand, the securities which the brokers pledge as collateral for security loans are not eligible for discount or purchase at the Federal Reserve Banks. Hence there is no definite connection between call loans and the discount rate, and often, particularly in times of active security trading, the call rate is substantially above the official discount rate of the Federal Reserve Banks. The fact that the most important open market in London, the bill market, has direct access to the Bank of England, gives the London money market a greater degree of liquidity than that prevailing in the United States, where the liquidity of the security loans depends primarily upon

the marketability of the securities offered as collateral for loans.

Although investment banking houses at times place large sums at the disposal of the market either in the form of call loans, as is the case in the United States, or by purchasing acceptances and treasury bills, as is the case in London, they are more often borrowers than lenders. Investment banking houses appear as borrowers for the purpose of carrying securities which they have underwritten or which they have acquired in the open market. Such loans do not differ from those made to brokers; they are secured by collateral and may be contracted on a call or time basis.

In countries where the money market is well organized, governments frequently appear as heavy borrowers of short term funds. In the United States government borrowing assumes the form of the sale of treasury notes with a maturity of one to five years, of certificates of indebtedness with a maturity of thirty days to one year and of treasury bills which have similar maturities. In London in post-war years the Treasury has made it a practise to issue every week a certain amount of treasury bills, usually about £40,000,000, which are absorbed by the open market. To a considerable extent therefore money market conditions in London are affected by the amount of treasury bills offered and redeemed. It is obvious that when the Treasury redeems more bills than it offers, money rates will go down, and vice versa, when a greater demand upon the money market is made by the Treasury, there will be a tendency for rates to rise. Short term treasury bills and certificates of indebtedness played a less important role in the New York money market until 1930, but by the end of 1932 the amount of short term government securities outstanding was greater than that of any other type of short term credit instrument.

In addition to the principal borrowers in the open market there are a number of types of institutions which either regularly or occasionally appear as borrowers in the open market. These include corporations which obtain funds by sale of their short term promissory notes or commercial paper. This method of borrowing is common only in the United States and is used exclusively by nationally known corporations of high credit standing. Investment trusts moreover appear as borrowers in the market at times when they find it desirable to buy securities with the aid of bank credit. Often, however, invest-

ment trusts also lend money to brokers on collateral.

Because of the intimate connection between the separate markets within the general money market the rates prevailing in the various markets are closely related. In London this is the result of the close relationship between all open market rates and the Bank of England discount rate. As a rule the Bank of England rate is the highest prevailing in the market. It is followed by the rates on treasury bills and prime bankers' bills, which in turn are higher than the rate at which the bill brokers obtain loans from the joint stock banks on call or short notice. The lowest rate is that paid by the joint stock banks on deposit accounts, which is usually 2 percent below the discount rate. This 2 percent rate differential decreases only when the discount rate of the Bank of England is 2 percent or below. Thus in England under ordinary circumstances any change in the Bank of England rate immediately affects all other rates and only very seldom is there a change in the rate structure described above. The same applies to the continental countries, where the discount rate as a rule is higher than other open market rates.

In the New York money market two distinct rate structures are in existence: rates which stand in a definite relationship to the discount rate of the Federal Reserve Bank and those which are not so related. In the first class are the rates on acceptances, commercial paper, short term government securities and federal funds. These rates invariably move in close relationship with the discount rate and are usually somewhat lower, since the transactions to which they apply may be shifted to the Federal Reserve Banks. Entirely distinct from these rates is the rate on collateral loans (brokers' loans) which cannot be shifted to the reserve banks. This rate has therefore no definite relationship to the discount rate. There is, however, a definite relationship between the different rates in the New York money market. If the call rate is higher than the other open market rates, lenders will naturally place their funds in this market, with the result that the demand for acceptances, treasury bills and commercial paper is reduced and rates in these markets rise. Similarly a decrease in the call rate results in a shift of funds to other markets, thereby causing a lowering of other rates.

Every money market is to a greater or lesser extent subject to the control and domination of the central bank of the country. This control may be exercised through the discount rate of

the central bank, which has a direct and often an immediate effect on the other rates. A second instrument of central bank policy which has been widely used in post-war years is open market operations in government securities or acceptances by the central bank. Through the buying or selling of government securities or acceptances in the open market the central banks may either place funds at the disposal of the market or withdraw them. Open market and discount policies of central banks are usually co-ordinated with a view to making the discount rate effective.

The effect of open market operations in the various markets differs. In the United States the selling of government securities by the Federal Reserve Banks, unless offset by other influences, reduces the amount of member banks' reserve balances and may force them to increase their borrowings at the Federal Reserve Banks; this in turn may be, and usually is, accompanied by an increase in the discount rate. In England a reduction in bankers' balances brought about by the selling of government securities by the Bank of England forces the joint stock banks to call loans from the bill brokers, which in turn compels the latter to borrow from the Bank of England. Since the Bank of England rate is usually higher than the acceptance rate or bill rate, the forcing of the bill brokers into the Bank of England penalizes them and results in a general increase in the rate on acceptances.

The credit policies of many of the European central banks in post-war years have been influenced to a considerable extent by the movement of foreign short term funds. This was particularly true in Germany, where the discount policy from the time of the stabilization of the currency up to the collapse of the banking system in 1931 was dominated by the presence of a large volume of foreign short term funds in the Berlin money market. With the exception of the Bank of France, whose open market operations are greatly limited by law, all central banks in Europe have to a higher or lesser degree endeavored to influence the market through open market operations.

In normal times the principal money markets in each country are closely linked together in what is generally referred to as the international money market. Together they provide a system of facilities for the accumulation of the surplus liquid funds of the world and for shifting them from one market to another. Under normal conditions the major factor controlling the move-

ment of funds from one international financial center to another is the rate of interest prevailing in the individual centers. If there is an increase in the demand for funds in one center, interest rates will rise and this in turn will attract funds from other centers. In this manner the international money market serves to equalize to a considerable extent the demand and supply of funds in the money markets of all the leading financial centers and transfers the surplus funds to centers where they are most needed.

Before the war London was the unrivaled international financial center of the world, since neither Berlin, Paris nor New York could compete with the facilities for the investment of short term funds offered in London. The virtual abandonment of the gold standard by Great Britain in August, 1914, handicapped the London money market in the years immediately after the war, and New York became a keen competitor of London for the short term balances of the world and for certain periods even exceeded London in importance. After the stabilization of the pound sterling in 1925, however, London gradually regained its position and up to the abandonment of specie payments in September, 1931, competed with New York for the international financial leadership of the world. The leadership of New York was interrupted early in 1933, when the banking panic and the closing of the New York banks greatly injured the prestige of the dollar. Since 1928 Paris has again assumed the role of an important financial center, but lack of facilities for employment of short term funds makes it difficult if not impossible for that city to rival London or New York.

The rise of New York as an international financial center has caused certain significant changes in the operation of the international money market. As the London money market operated before the war, a large inflow of foreign funds placed more funds at the disposal of the bill brokers, but since the volume of bills did not increase automatically to the same extent, the result was a decline in bill rates which in turn tended to check a further inflow of funds. In New York, on the other hand, in the post-war period a large part of the foreign funds coming into the market was used for the financing of stock exchange transactions, thereby further aiding speculation in securities and creating a greater demand for funds. Since the demand for funds for stock exchange speculation has practically no limit during a boom period, the inflow

of foreign funds from abroad did not bring about a decline in interest rates and thereby prevented the automatic adjustment which usually took place in England.

With the abandonment of the gold standard in England in September, 1931, the international movement of short term funds in response to changes in interest rates in different centers came to a halt. The only transactions taking place represented either liquidation of commitments contracted prior to the abandonment of specie payments by Great Britain, the shifting of funds for speculative purposes or a flight of capital from one country or another for the sake of safety. At the beginning of 1933 the international money market had practically ceased to exist and the banking difficulties in the United States in March, 1933, destroyed the last vestige. Various suggestions have been made for the revival and reorganization of the international money market, some of them involving the use of the Bank for International Settlements to facilitate international movement of funds. A restoration of the international money market can, however, take place only when the currencies of the leading countries are again on a common standard and when economic and political conditions once more permit the free shifting of funds from center to center.

Each individual money market plays an important role in the national economy of the country which it serves and facilitates the financing of transactions, domestic and foreign, which cannot conveniently be financed by the banks individually. It offers the banks of the country the means of temporarily employing their surplus funds in liquid investments and constitutes a source from which they draw funds when special demands are made on them by their customers. The rates of interest prevailing in the open market, however, have only slight effect on the rates banks charge their customers on loans. The rate to customers depends on the geographical location of the bank, on the type of credit extended and on the credit standing of the customer. The money market deals only in standardized loans and credit instruments, and only those business enterprises which can comply with the standard requirements for such credit operations have access to the money market.

By the accumulation of surplus funds the money market facilitates the flotation of long term loans for governments as well as corporations. Conditions in the money market therefore

affect the rate of interest on long term capital and directly condition the movement of funds into long term capital investments. At times the influence of the money market on the capital market is such as to enable larger business enterprises to finance themselves directly instead of through the commercial banks. The money market is of importance to the government particularly in periods of budgetary deficits, since it makes it possible for the treasury to obtain funds not only for temporary needs but also for capital investments and improvements.

MARCUS NADLER

See: FINANCIAL ORGANIZATION; INTERNATIONAL FINANCE; INVESTMENT; INVESTMENT BANKING; BANKING, COMMERCIAL; CENTRAL BANKING; FEDERAL RESERVE SYSTEM; CREDIT CONTROL; SPECULATION; STOCK EXCHANGE; CALL MONEY; BROKERS' LOANS; ACCEPTANCE; FOREIGN EXCHANGE; ARBITRAGE.

Consult: Greengrass, H. W., *The Discount Market in London* (London 1930); Blum, Eugen, *Die deutschen Kreditmärkte nach der Stabilisierung*, Betriebs- und finanzwirtschaftliche Forschungen, 2d ser., no. 41 (Berlin 1929); Burgess, W. R., *The Reserve Banks and the Money Market* (New York 1927); Germany, Ausschuss zur Untersuchung der Erzeugungs- und Absatzbedingungen der deutschen Wirtschaft, Unterausschuss v, "Die Reichsbank" and "Der Bankkredit," *Verhandlungen und Berichte*, vols. i-ii (Berlin 1929-30); Brandes de Roos, R., *Industrie, Kapitalmarkt und industrielle Effekten in den Niederlanden*, 2 vols. (The Hague 1928); Riefler, Winfield W., *Money Rates and Money Markets in the United States* (New York 1930); Houwink, A., *Acceptcrediet* (Amsterdam 1929); Hahn, Albert, *Geld und Kredit* (Tübingen 1924); *The New York Money Market*, ed. by B. H. Beckhart, 4 vols. (New York 1931-32) vols. iii-iv; Spalding, W. F., *The London Money Market* (4th ed. London 1930); Hirst, Francis W., *Wall Street and Lombard Street* (London 1931).

MONEY RAISING DRIVES. *See* DRIVES, MONEY RAISING.

MONOD, GABRIEL JACQUES JEAN (1844-1912), French historian. Monod was professor of history at the École Pratique des Hautes Études, at the École Normale Supérieure and later at the Collège de France. In 1875 in conjunction with G. Fagniez he founded the *Revue historique* and served as its editor until his death. Both as teacher and as editor Monod exerted a decisive influence on French historiography. At the École des Hautes Études, where he taught from 1868 to 1905, he conducted exhaustive researches into the Merovingian and Carolingian periods, training a group of students who became the outstanding contributors in this field. From his researches Monod himself produced

suggestive studies on Gregory of Tours (*Grégoire de Tours*, Paris 1872) and on the literary and historical renaissance of the Carolingian epoch (*Études critiques sur les sources de l'histoire carolingienne*, Paris 1898), besides a manual of Merovingian and Carolingian institutions which he never prepared for publication. In innumerable articles in the *Revue historique* he continued during almost forty years to follow closely the historical movement and to give his advice, which always carried great weight, on questions of method and organization of historical work. His *Bibliographie de l'histoire de France* (Paris 1889), which appeared at a time when there did not yet exist in France a bibliographical index to French history, has greatly facilitated the task of succeeding scholars. Monod devoted important studies to several historians of the nineteenth century (*Les maîtres de l'histoire*, Paris 1894, 3rd ed. 1896), including Taine, Renan and especially Michelet, whose papers he possessed and on whom he wrote a number of works. Of these *La vie et la pensée de Jules Michelet, 1798-1852* (2 vols., ed. by C. Bémont, Paris 1923) is the most important.

LOUIS HALPHEN

Consult: Bémont, C., and Pfister, C., in *Revue historique*, vol. cx (1912) i-xxiv; Bémont, C., in *École Pratique des Hautes Études*, Section des Sciences Historiques et Philologiques, *Annuaire* (1912-13) 5-41, with inclusive bibliography.

MONOGAMY. See MARRIAGE.

MONOMETALLISM. See BIMETALLISM AND MONOMETALLISM.

MONOPOLIES, PUBLIC. Public monopolies present a form of economic enterprise in which the elimination of competition—the essential characteristic of monopoly—is sanctioned by public authority. They generally fall into two major groups: public natural monopolies and public monopolies proper, the latter frequently being referred to as legal monopolies. The first group comprises the numerous monopolies in the field of public utilities, such as transportation, communication, water supply and the like, which derive their position as monopolies primarily from the natural conditions of production; the legal act of monopoly merely involves a transfer to the state of an industry which already is a monopoly or inherently tends toward it. The main purpose underlying such action is the desire on the part of the state to prevent the possible exploitation of the consumers by private

entrepreneurs in monopolistic control of commodities or services indispensable to the welfare of the community (for monopolies of this type see PUBLIC UTILITIES; GOVERNMENT OWNERSHIP). The distinguishing feature of the second type of public monopoly is that its status is a deliberate creation of legislative fiat and can be maintained only by the power of the state itself. Such a legal monopoly may be created either for regulatory or for fiscal purposes. The former category includes government monopolies in the manufacture of explosives, dictated by considerations of national security; monopolies in the issue of currency, designed to assure a certain degree of monetary stability; and monopolies which partake of the nature of sumptuary legislation, intended to restrict the consumption of certain commodities in the interests of public health, such as the opium monopoly in India. Of wider significance, however, is the type of monopoly whose sole purpose is to increase the revenues of the state, such as tobacco monopolies in France, Austria and other countries. This fiscal, or financial, monopoly, with which this discussion will be mainly concerned, is essentially a tax device; the difference between the charge of the monopoly and what the price would have been if the commodity or service were supplied under competitive conditions constitutes the indirect payment of a consumption tax. Finally, it should be remembered that many public monopolies do not fit into a clear cut classification and present a combination of regulatory and fiscal purposes, of which one or the other may dominate the policies of the monopoly administration.

While the public natural monopoly is largely an outgrowth of modern conditions of large scale production and concentration of economic power, public monopolies proper stem directly from the patents and monopolies granted in earlier periods under the royal prerogative. The practice of granting monopoly privileges to corporations and individuals in exchange for the payment of stipulated sums first assumed wide proportions in France and England, where the existence of a wide internal market and area of control necessary for an effective monopoly existed at an earlier period than in other countries. The granting of monopoly rights was often prompted by the desire of the king or prince to encourage the development of a new industry, to promote discoveries and exploration of new markets, to attract foreign craftsmen and, finally, to reward loyal citizens and royal favorites. The general

dissatisfaction caused by the abusive price practices of the monopolistic entrepreneurs led in England to the abolition of the royal prerogative in 1689 and to the disappearance of this form of monopoly. In other European countries, like France, Austria and Italy, some of the earlier monopolies granted to private entrepreneurs were in time taken over by the governments and incorporated into the general fiscal structure of the respective countries.

In addition to these "old" monopolies many governments have in modern times resorted to the creation of new monopolies by converting into public monopolies industries which developed under conditions of private competitive enterprise. This practise has been particularly widespread since the World War, when most countries, especially on the continent, have been compelled to look for new sources of public revenue to cover mounting budgetary deficits. The distribution of the more important fiscal monopolies in European countries before and after the World War is given in the accompanying table. The motives underlying the creation of the "new" monopolies have been either fiscal or regulatory, frequently a combination of both. Examples of fiscal monopolies with a regulatory purpose are the spirits monopoly in Soviet Russia and the post-war quinine monopoly in Italy.

In both instances the coexistence of the two motives leads to difficult problems of policy. In the former the purpose of regulation, which would tend to discourage consumption, may come into conflict with the desire to encourage sale and thereby to augment public revenue. The spirits monopolies in Germany, Switzerland and France, although fiscal in form, are used primarily as a means of assuring to the producers of alcohol yielding grain and fruits a profitable and non-competitive price, thereby serving to perpetuate the existing system of agricultural proprietorship in the respective countries. An admixture of social policy and fiscal consideration is exemplified also to some extent by the liquor monopolies in the provinces of Canada, which although intended originally to be instruments of sumptuary control began in time to assume some importance as a source of public revenue. Similarly the fiscal motive has become of growing importance in the increasingly strong movement for the repeal of prohibition in the United States.

On the other hand, fiscal considerations were paramount from the outset in the creation of a tobacco monopoly in Japan in 1898 and in Sweden in 1914. In both instances the occasion for the creation of the monopoly was the sudden additional need for funds caused in Sweden by

GEOGRAPHICAL DISTRIBUTION OF SELECTED FISCAL MONOPOLIES IN EUROPE BEFORE AND AFTER THE WORLD WAR*

TOBACCO	CIGARETTE PAPER	ALCOHOL	MATCHES	SALT
		BEFORE THE WAR		
France	Serbia	Switzerland	France	Italy
Italy	Rumania	Serbia	Italy	Austria-Hungary
Austria-Hungary	Bulgaria	Russia	Spain	Serbia
Spain	Greece		Turkey	Rumania
Portugal			Serbia	Greece
Serbia			Rumania	Turkey
Rumania			Bulgaria	
Turkey			Greece	
			Portugal	
NEW MONOPOLIES AFTER THE WAR				
Sweden		Germany	Germany	Poland
Danzig		Soviet Russia	Danzig	Jugoslavia
Poland		Norway	Poland	Czechoslovakia
Czechoslovakia		Latvia	Estonia	
Greece		Estonia	Lithuania	
Vatican		Poland	Jugoslavia	
Estonia		Turkey		
Jugoslavia		France		
		Finland		
		Jugoslavia		
		Lithuania		
		Rumania		

* Not included in this table are the relatively rare instances of fiscal monopolies in quinine, petroleum, lotteries, benzine, sugar, fax, revolvers, confectioneries and printed posters, scattered in various European countries.

the introduction of old age insurance and in Japan by expenditures incurred in the war with China. In neither country, however, was the system of tobacco taxation well developed, and it would probably have been possible to obtain an increase in revenue equal to that attainable by monopoly through an increased tax on tobacco. In Sweden monopolization seemed preferable to an increase in the tobacco tax, as it was feared that the imposition of the latter upon an industry which was organized predominantly in small plants would have the effect of intensifying competition and would lead to wholesale bankruptcies and eventually to concentration of control in the hands of a few to the detriment of the small producer. The act of monopoly, on the other hand, provided for the indemnification of all producers.

A variant of the fiscal motive is evidenced in the monopolies which were created for the purpose of serving as pledges in securing public loans. This practise became particularly widespread in the years following the World War, when many European countries confronted by fiscal deficits found it difficult to secure loans without pledging specific sources of revenue as security for the loans. Instances of such monopolies are the match monopolies in Danzig, Poland, Germany and in the Baltic States pledged to Ivar Krueger as security for the loans advanced by him to the respective governments. In other instances monopolies already in existence were used for the same purpose. It should be pointed out, however, that there is nothing in a public monopoly as such which makes it particularly suitable to serve as security for public loans; ordinary excise taxes or customs duties serve the purpose equally as well.

Since the primary purpose of the fiscal monopoly is the securing of public revenue, the fiscal motive determines the choice of the commodity. The commodities most frequently singled out for monopolization are tobacco, alcohol, matches, salt—these, although widely consumed, are not, with the exception of salt, absolute necessities; their consumption rather reflects a certain degree of paying capacity on the part of the consuming public. The imposition of the fiscal charge in the form of the monopoly price would not therefore result in an abrupt decline in consumption, a circumstance which would defeat the very purpose of monopolization. In order to protect the monopoly against evasion on the part of consumers resorting to self-made or imported goods, compensatory duties or taxes are usually im-

posed on commodities which are subject to monopoly.

In addition the fiscal motive is the deciding factor in the determination of the scope of monopoly control. There has usually been differentiation, in the literature of the subject, between full and partial monopoly. A full monopoly exists if all the stages in the production and distribution of a particular branch of industry are under government control. This is the case in the tobacco monopolies in France and Austria, which purchase the tobacco through their own departments, prepare it and have it sold through specially licensed retail distribution centers. In a partial monopoly control is confined only to one stage in the process of production; all other stages in production and distribution are left to private enterprise. This is true of the spirits monopoly in Germany whereby the government controls the process of distillation of the privately manufactured spirits, which are returned for distribution to private enterprise after the imposition of the fiscal surcharge. The liquor monopolies in the Canadian provinces leave the entire process of production to private enterprise, confining themselves to retail distribution of the product.

The organizational forms of fiscal monopolies have undergone considerable change in recent years. Until shortly before the World War the dominant form was that of a purely administrative department of the general fiscal apparatus of the state; all details of operation were a part of the administrative routine, subject to the immediate supervision of the fiscal authorities. Especially typical of this form was the French tobacco monopoly until 1926; it was administered by two governing boards, the *Direction Générale des Manufactures de l'État* and the *Direction Générale des Contributions Indirectes*. The former supervised the purchase of raw tobacco and manufacture, while the latter, also an agency for the collection of the excise tax, supervised the sale of the manufactured product to the retailers. Both were divisions of the general financial administration and under the direction of the minister of finance. The director of manufactures was limited in all his actions. No single purchase for the factories could exceed 12,000 francs without the authorization of the minister of finance. The regulation of salaries, promotions and personnel, which were determined by length of service rather than by ability, lay with the general financial administration. For technical alterations the authorization of the minister of finance

was required. Expenditures were limited by the budget, not only in total extent but also in individual items; no possibility of transfer of credit existed. There was no commercial system of accounting, and there were no reserves which would permit the monopoly to take advantage of favorable buying opportunities. If such reserves were requested, the need was investigated by the Commission Sénatoriale des Finances, just as were the financial requirements of other branches of the administration. The result was an administration which was extremely inflexible, incapable of adjustment to opportunities in the market, bound by elaborate regulations and administrative routine and severely restricted in its business activity. Consequently most fiscal monopolies in recent years have introduced more independent forms of organization, endowed with greater freedom in their commercial transactions, as exemplified by the wider scope of functions assigned to the commercial director in the Austrian tobacco monopoly and to the administrative body of the French tobacco monopoly since 1926. Considerations of economy and efficiency also determine whether in the countries where several fiscal monopolies exist separate organizations shall be established for each monopoly, as, for instance, in Germany, or whether the existing monopolies shall be merged into one central organization, as in the case of the seven monopolies in Jugoslavia.

In the case of the new monopolies, that is, those which have been called into being through the conversion into a fiscal monopoly of a branch of industry hitherto privately controlled, the participation of private capital has as a rule been necessary. But it has been also on grounds of managerial efficiency that this type has assumed the form of a commercial enterprise. The participation of the state is assured by the appointment of a representative of the government to the board of directors or by the provision that price changes must be promulgated by legislation or by ordinances with force of law. The Danzig tobacco monopoly serves as an example of the form of organization of the new monopolies. This monopoly is managed by a director and supervised by a board elected by the stockholders. A state commissioner acts as the representative of the government. The division of profits is so regulated that after payment of the fiscal levy the share of the stockholders decreases with increasing profits but always remains sufficiently great to furnish an incentive for increasing productivity. The advantage of this system lies in

the skilful application of a profit sharing device which retains the profit making incentive for the managers of the monopoly while at the same time giving to the state the lion's share of the profits.

The general increase in taxation which marked the fiscal development of post-war years, particularly in Europe, and the resulting search for new sources of revenue have brought to the fore the problem of whether increased revenues, no longer realizable through the usual process of raising the existing taxes, can be secured by the transformation into a monopoly of a hitherto private but taxed industry. The problem has been of particular interest in Germany, where the taxable resources have been strained to the utmost in the years of post-war financial stringency. The discussion has centered around the relative merits of a tobacco monopoly over a private tobacco industry, subject to excise. The fiscal monopoly undoubtedly offers certain advantages over the ordinary consumption tax. The yield is likely to be higher in that it includes also the profit share which would otherwise accrue to the private entrepreneur. It provides the government with a more flexible tool in adjusting revenue than that offered by the cumbersome method of changing tax rates. By controlling prices and thus regulating the amount of the tax to be included in the charge the monopoly can effect a finer differentiation of the tax with regard to qualitative differences of a commodity than that provided by the practise of setting up a series of differential excise rates for specified grades of a privately produced commodity. Finally, by its centralized control the monopoly permits a greater degree of rationalization of the processes of production and distribution than if these were left in the hands of numerous private producers and distributors. The last advantage appears striking, if one compares, for example, the relatively higher proportion of profits of the Austrian tobacco monopoly with the share yielded by the German tobacco tax. Investigations have brought out the fact that the production costs of the Austrian and other tobacco monopolies are considerably below those of the German tobacco industry. It has thus been generally concluded that the conversion of the German tobacco industry into a monopoly must immediately be attended by increased fiscal revenues. This conclusion, however, does not take into account the great expenses involved in compensating the private owners, the social effects of the uprooting of thousands of independent produc-

ers and the necessarily slow performance of a new monopoly. Furthermore the experience of the Swedish tobacco monopoly which was built upon a hitherto free tobacco industry has revealed that the resulting decrease in cost was almost entirely in the field of distribution rather than in that of production. It is therefore highly questionable whether a comprehensive monopolization act, including all stages of production and distribution, would bear a reasonable relationship to the cost of conversion. Nor is the introduction of a partial monopoly free from serious difficulties. It is scarcely possible in the long run to submit to monopoly control one stage in the process of production or distribution of a commodity with any degree of fiscal success without at the same time disturbing the preceding or succeeding uncontrolled stages. Thus a monopoly of the wholesale trade in tobacco products, such as has been suggested for Germany, would expose the producers to the price dictatorship of the monopoly administration, which in its desire to increase revenue might be tempted arbitrarily to reduce the purchase price of tobacco and thus to force the small producer out of business. Moreover the advocates of monopoly frequently ignore the fact that the government could in many instances increase considerably the taxable capacity of an industry subject to excise by a compulsory lowering of the profit margin allowed to the retailer, thereby securing some of the benefits of monopoly without the difficulties involved in the act of monopolization.

The fiscal importance of the monopoly in the budgets of the various countries cannot be reduced to a common denominator. An international comparison reveals a close correlation between the share contributed by general consumption taxes and that yielded by fiscal monopolies. The fiscal monopoly is consequently of greater significance in countries of limited capitalistic development, especially in southern and southeastern Europe, where property and income taxes are not sufficiently productive to justify the maintenance of an elaborate collection machinery and the state has to resort to various indirect consumption taxes including the fiscal monopoly. Thus in Poland the yield derived from fiscal monopolies in recent years was in amount equal to approximately 59 percent of the amount raised from general tax sources, in Turkey 51 percent, in Jugoslavia 40 percent, in Austria 39 percent, in Lithuania 38 percent, in Czechoslovakia 35 percent, in Rumania 33 percent, in Latvia 29 percent, in

Estonia 26 percent. Among western countries France secured from fiscal monopolies an amount equal to 32 percent of the total raised by taxation, Spain 25 percent, Sweden 17 percent, Norway 12 percent, Germany approximately 7 percent.

It is extremely difficult to determine the comparative economic efficiency of monopolies in various countries. The actual revenue can scarcely be taken as a criterion of efficiency, since it depends largely upon the general taxable capacity of the country rather than upon the performance of the respective monopolies. An inefficiently run monopoly in a wealthy country will at all events bring in larger revenue both per capita and per unit of product than an efficiently run monopoly in a poor country. An international comparison would therefore require a thorough examination of cost of production and its constituent elements with all the difficulties attending international comparison of cost phenomena. The limits of an international comparison of fiscal monopolies are consequently more narrowly defined than are the limits of an international comparison of taxation.

HERBERT GROSS

See: MONOPOLY; REVENUES, PUBLIC; EXCISE; TAXATION; PUBLIC UTILITIES; GOVERNMENT OWNERSHIP; GOVERNMENT OWNED CORPORATIONS; SUMPTUARY LEGISLATION; LOTTERIES; LIQUOR TRAFFIC; MATCH INDUSTRY; TOBACCO; PAWNBROKING; PUBLIC DEBT; CHARTERED COMPANIES; MERCANTILISM.

Consult: Madsen, A. W., *The State as Manufacturer and Trader* (London 1916); Gross, H., "Die Organisationsformen des Finanzmonopols in Europa" in Verein für Sozialpolitik, *Schriften*, no. 176, pt. iii (Munich 1931) p. 1-55, and *Tabakmonopol und freie Tabakwirtschaft*, Universität Kiel, Institut für Weltwirtschaft und Seeverkehr, *Schriften*, no. 51 (Jena 1930); Bräuer, K., *Reichs-Tabakmonopol oder Tabak-Verbrauchssteuer?*, Finanzwissenschaftliche und volkswirtschaftliche Studien, no. 21 (Jena 1931); Majorana, S., articles in *Rivista di politica economica*, vol. xx (1930) 659-76, 737-56, 944-59, vol. xxi (1931) 26-39, 303-16, 564-82, 965-74, 1097-1108, and vol. xxii (1932) 24-43, 153-65, 310-19; Røgind, Sven, *Spiritus-monopolet* (Copenhagen 1925); Schwarzenberger, Georg, *Die Kreuger-Anleihen* (Munich 1931); Cohn, Gustav, *System der Finanzwissenschaft*, System der Nationalökonomie, vol. ii (Stuttgart 1889), tr. by T. B. Veblen as *The Science of Finance* (Chicago 1895) p. 431-58; Kambe, Masao, "State Monopoly as a Method of Taxing Consumption" in *Kyoto University Economic Review*, vol. vii, no. i (1932) 1-13.

MONOPOLY. The principle of monopoly may be defined as unified or concerted discretionary control of the price at which purchasers in general can obtain a commodity or service and of

the supply which they can secure, or the control of price through supply, as distinct from the lack of such control which marks the ideal situation of perfect competition. The principle applies *mutatis mutandis* to buyers' monopoly and should properly also be applied to similar control of quality or of any other matters which are subjects for bargaining. The term is sometimes loosely used to cover any strict limitation of supply not resulting from concerted or unified discretionary action by persons or groups—for instance, the limitation of supply of particular grades of land or of labor—but this usage is probably inexpedient, as it leaves no point at which the principle of monopolistic control may be distinguished from the universal principle of scarcity. As distinct from monopoly the principle of competition represents a condition in which no individual, group or bargaining unit has any discretionary control over general supply or price, these being completely governed by the separate actions of the competitors, who follow their own interests in entire independence. Pure monopoly is not frequent, and close approximations to pure competition in the strict theoretical sense are extremely rare; most actual situations represent something intermediate, with varying degrees of discretionary control, and subject to varying degrees of competitive checks. The conceptions of pure monopoly and of pure competition are then for the most part abstractions, useful for certain purposes of analysis but seldom realistically describing concrete situations.

Monopoly is generally regarded as being limited in its control by the power of the purchaser to substitute some other commodity or service for the one controlled by the monopolist. In the case of a buyer's monopoly this would mean the power of the seller to find some different kind of outlet for the thing he has to sell or some other use for the resources involved in its production. In actual practise the distinction between the threat of substitution and the threat of competition from rival producers of what may be regarded as "the same" commodity is a hazy one. Since manufacturers of quality goods typically seek to establish a difference or an impression of a difference between their products and those of their competitors, it is perhaps permissible to say that to the extent to which they succeed they possess a monopoly of those elements in which their product or its reputation is unique but not of the basic elements of service common to their product and to that of their

rivals. Such a monopoly, however, unless fortified by patents, secret processes or other obstacles to imitation holds a peculiarly limited degree of power, since rivals are free to make an identical product and to build up an equivalent reputation for it.

Another angle of the distinction between monopoly and competition may be approached via the character of the demand schedule for the product offered by a single producing unit or controlling group. Theoretically perfect competition requires a condition in which a competitor cannot sell goods at a higher price than his rivals are charging and can take their customers away from them by cutting his price very slightly below theirs. In the language of demand schedules the demand for one competitor's product taken by itself is infinitely elastic through an indefinitely small price range on both sides of the price which other competitors are charging. This is the reason for the tendency of competition to lower prices until returns are no more than the necessary supply prices of the factors of production; and any circumstance which gives the individual producer a less elastic demand schedule than this puts him in a position to maintain prices somewhat above the theoretical competitive minimum.

With a complete monopoly, on the other hand, the demand schedule for the product of the monopolistic organization is coextensive with the consumers' whole demand for that product. Whether it is relatively elastic or inelastic, it will seldom or never have that infinite elasticity at one critical point which is the mark of "perfect" competition. It may show high elasticity through a price range at which the monopolized product is about as attractive as some important substitute; but just because the substitute is a different kind of thing, consumers' preferences are likely to interpose some inertia, so that there will be no definite price above which all consumers will shift to the substitute and below which none will do so. This is true even over long periods of time and still more for short periods. With a finite elasticity of demand the law of monopoly price comes into play. Raising of the price above the strict competitive level yields a net profit, although on a decreasing volume of business; and somewhere above the strictly competitive level this net profit will reach a maximum.

If producers of branded and quality goods, with their quasi-monopoly position, do not always realize a net profit in this sense, the

reason is to be sought, first, in the long run sensitiveness of their sales to the relative prices charged by them and their competitors, which may be much greater than the short run sensitiveness; second, in the effects of overhead or constant expenses, which introduce a condition whereby monopoly profit may be a minus quantity if there is surplus productive capacity; third, in the effect of the unpredictable fluctuations in business activity which result among other things in an intermittent state of surplus capacity; and, finally, in the costs of building up the goodwill of a brand, a cost which is essentially competitive.

Neither the theory of monopoly nor that of competition was fully developed before the nineteenth century. Elements of monopoly control were, however, common in the social organization of the Middle Ages as they had been in that of the later Roman Empire. The craft guilds controlled admission to the crafts, set standards of workmanship and adhered to the doctrine of the just price. The restrictions on entrance to membership undoubtedly became monopolistic in limiting the number who could become masters. Of a different character was the mediaeval regulation of markets, which set out to secure "direct selling" and to prevent speculation and corners. A guild rule whereby a member who secured an unusually good bargain in his materials was bound to share it with his fellow members served to prevent one kind of competition, which was, however, of rather doubtful value to the consumer. Such regulations aimed to maintain stability, and the monopoly they permitted was essentially a monopoly of status.

The impact of changing techniques and expanding trade shattered this system but did not automatically introduce free competition. The early national governments granted monopolies in distant trade to large organizations, such as the East India Company, while domestic monopolies were sold for revenue purposes or were granted to favorites. The doctrine of the just price was never applied to distant trade; Martin Luther thundered against the monopolistic practices of great trading organizations in terms suggestive of the early days of the American crusade against the trusts.

While the control of prices was first being shifted to the royal governments and then falling into desuetude, there were certain activities in which the obligation to serve all comers at a fair price persisted. These were thought of as public

callings in a special sense distinct from the general conception of "holding oneself out" to serve the public, formerly applied to anyone who offered his services to all and sundry in the regular way of business. Common carriers are the type of such public callings; and the persistence of their subjection to control is presumably to be explained as due to the recognition either of an element of natural monopoly or of a situation in which the consumer is handicapped in getting the benefit of whatever competition there may be, like the traveler who patronizes a hotel or inn.

During the first half of the nineteenth century the competitive system was probably more generally in effect than ever before or since. The East India Company was deprived of its monopolistic trading privileges in India in 1813 and in the China trade in 1833. The survivals of guild privileges lapsed before the changing techniques brought by the industrial revolution, while labor organizations were treated as conspiracies. Those "natural monopolies" which are classed as public utilities had nothing like the importance they have since acquired; and the more characteristic modern forms of monopoly in other fields had gained no great development. Thus the term competitive system was a fairly accurate description of the actual state of affairs.

With the coming of the railroad there was added to the system a huge industry which was at least in a partial sense naturally monopolistic. The resultant broadening of markets led to the development of industries serving an entire continent and more, based on large scale units operating with great masses of fixed and specialized capital. The outcome was the trust movement in America and the development of cartels and other forms of combination in other countries.

These monopolistic developments were definitely related to the new forms of industrial technique. Concentrated production reduced the number of competitors and brought unification within reach. The massed control of patents furnished another basis of power, whereby in place of mere temporary monopolies of single processes of production there could arise more durable monopoly power over the product which these patented processes serve to make. The newly developed fuel—oil—with the large scale refining operations it required afforded the field for one of the most conspicuous of the early trusts, the Standard Oil Company. Railroad

discriminations and other forms of competitive sharp practise acquired a wholly new significance when systematically used by a great concern for the wiping out of competitors and the establishment of a monopolistic position. In other cases there was fear or threat of a form of competition which would drive prices below cost for all producers, a danger in great measure due to the existence of very large fixed capitals and the corresponding volume of constant costs. Cournot had already noted that in such a case, if any net returns are earned, it must be by virtue of some monopolistic element in the situation, since with unqualified competition returns would be a minus quantity.

The desire to escape the threat of such price warfare was prominent in the situation which led to the formation of the United States Steel Corporation; but as the antitrust laws made complete consolidation out of the question, there developed here and in other industries more informal arrangements between large and small producers which influenced price policies. Such were the "Gary dinners," where the steel price situation was talked over. More important is the practise of "price leadership" by dominant concerns, through which without overt concerted action a fairly effective safeguard is erected against what Marshall has called "spoiling the market." Trade associations may contribute to similar results.

This hybrid situation represents the response of American business to the antitrust laws; in Europe the drive toward monopoly was expressed in the formation of cartels (*q.v.*) and combines, often with government encouragement or assistance. Since the World War there have been increasingly frequent attempts at the formation of monopolies in the international sphere. International cartels have met with but limited success. Recurring crises of overproduction of basic raw materials have brought into prominence the idea of valorization (*q.v.*), or definite arrangements for the control of the supply and the price of internationally important staples on a national or international scale, frequently with participation or approval of the governments of the producing countries. Twenty or more important raw materials have been so controlled in the years since the war.

A survey of modern tendencies toward monopoly should include mention of farmers' cooperative marketing organizations, which obviously limit the field of competition in selling agricultural products but which, however, in

their ordinary form have no effective control of the supply of the products they sell. Agriculture seems to be in a different class from manufacturing in that it is extremely difficult to make effective any control of supply, whether monopolistic or merely prudential and aimed at the prevention of cut-throat competition.

In the field of labor various stages in the series from pure competition to outright monopoly include collective bargaining, the closed shop and the control of numbers through apprenticeship. The last is clearly monopolistic if it goes beyond what is necessary to protect the workers against attempts of the employer to use apprenticeship as a mere device for hiring labor at substandard rates. Collective bargaining at rates yielding normally full employment to the members of an inclusive union does no more than insure the ideal of the competitive market: one price in one market and no secret differentials or discriminations. But full employment is an indefinite quantity, and it may seem advantageous to maintain wage rates even at times when the demand for labor at those rates is clearly short of the supply. The union will usually maintain—presumably in entire good faith—that the resultant unemployment is due to other causes and is not made worse by the maintenance of the wage rate; and such a contention can seldom if ever be proved false. The closed shop may be a means to making collective bargaining effective or it may be an instrument of monopoly policy. One of the important results of monopolistic policies in the field of labor is the sharpening of the contrast between the skilled and well organized workers and the unskilled and unorganized.

The classical economists built their conception of the "natural" course of economic affairs on the assumption of free competition but without much analysis of its nature or the machinery of its operation. To them monopoly meant primarily the legal monopolies granted by the national governments in distant trade, although Adam Smith extended the idea to mercantilist restrictions confining trade to members of one country and in a larger and secondary sense to apprenticeship restrictions and survivals of guild privileges. His attitude was somewhat paradoxical and unsatisfactory in that he noted: "People of the same trade seldom meet together, even for merriment and diversion, but the conversation ends in a conspiracy against the public, or in some contrivance to raise prices. It is impossible indeed to prevent such meetings, by any

law which could either be executed, or would be consistent with liberty and justice." Yet he continued to treat the competitive system as the natural order. The evils of monopoly as the classical economists saw it lay not merely in high prices but apparently quite as much in inefficiency and in the warping of the natural apportionment of labor and capital between different occupations. Some of the classical economists spoke of land as a natural monopoly; and John Stuart Mill noted that a trade may gravitate into so few hands—especially where large capital is required—that profits may be kept up by combination.

The pioneer in the quantitative formulation of the law of monopoly price was Augustin Cournot (*Recherches sur les principes mathématiques de la théorie des richesses*, 1838). He formulated algebraically the conditions of the maximum profit price under absolute limitation of supply, in case of production without cost or at constant cost irrespective of output and in case of costs varying in different fashions in response to changes of output, as well as the effects of changes in costs or of taxes of various sorts.

The theory of the monopolistic principle has hardly developed apace with the movements in actual practise. The original theory of pure monopoly price, namely, the price yielding maximum profit, limited only by the consumer's demand schedule for the commodity and by the behavior of costs of production, remains much as Cournot left it; but the cases to which it may be applied are rare. Monopolies of this sort are probably limited in the main to temporary patent monopolies on new commodities, as distinct from the far greater number of patents on processes of production, and to a few international commodities, such as diamonds and mercury, where the bulk of production and the bulk of consumption are in different countries and where for this reason the governments of the producing countries are less likely to feel that the protection of the consumer against exploitation is paramount over the profits of the producer. To the extent that these monopolies are temporary the element of time becomes a significant and undeveloped part of the theory of monopoly price.

Another possible area of further theoretical development lies in the behavior of substitution. This can be expressed by changes in the slope of the demand curve, which flattens out and becomes much more elastic at critical points where a change in the price of the monopolized

commodity will cause a substitute to be preferred or vice versa. The price yielding maximum profit will frequently lie just below such a critical point. Under substitution may well be included such imitations of patented goods as can be made without technical infringement. The patented product often has little more than a nominal monopoly.

Aside from the large and growing field in which the monopoly price is fixed by public authorities, the effective limitation on prices charged by producers who have some measure of monopoly power generally falls at a point somewhat below that set by the consumer's demand schedule. Prices are kept below this point by public pressure or the desire to forestall public action or by the fact that a grasping policy will bring into effective existence competition which is now dormant.

One might expect to find more completely developed the theory of hybrid conditions, of those intermediate situations in which competition exists but competitors are too few and too large for the condition of theoretical pure competition. Yet this situation—variously called duopoly and monopolistic competition—affords one of the most baffling problems in the field of theory, to judge by the different results attained by different authorities attacking the problem with different hypotheses. In general, interest has centered in the problem of the determinateness or indeterminateness of price under such conditions, and few attempts have been made to compare the assumptions used with actual conditions, in order to see which results are appropriate to which types of existing situations.

Cournot employed the assumption that when one producer increases his supply and lowers his price in order to market it, the other producer continues to market his previous supply unchanged, although meeting the first producer's cut in prices. On this basis he deduced a price intermediate between that of pure monopoly and that of pure competition. The result may seem plausible, but the assumption appears inapplicable to any actual situation. Amoroso followed a similar line of argument and was criticized by Edgeworth, who himself developed a theory of oscillations between the monopoly level and a lower one, at which both producers would sell their full capacity output (costs of production being neglected for the sake of simplicity). The tendency downward toward this limit Edgeworth derived from an assumption different from Cournot's; namely, that if one

producer cuts the price he will take customers away from the other. At the point where both are selling their full possible output this force clearly ceases to act; in fact before this point is reached the power of the price cutter to take business away from his rival becomes so small that the rival loses less by maintaining his price. The oscillation deduced by Edgeworth is due to the assumption of an absolute limit on productive capacity combined with the supposition that a very small cut in price will enable a producer to take from his rival as much business as he has capacity to handle, while a large difference in price can naturally do no more. Thus there is reached a point at which a concern has the option of a small cut in price (its gains in volume of business being limited by its productive capacity) or a large increase in price (its losses in volume of business being limited by its rival's productive capacity); either course might bring at least a temporary gain.

A more realistic assumption would seem to be that combined productive capacity considerably exceeds demand at cost prices. Under these conditions duopoly would drive prices down to the competitive level, so long as the price cutter gains business in the way Edgeworth presupposes. A different hypothesis is that one producer's cut in price is instantly followed by another's and that the first foresees this and so knows that he can get no business away from his rival. Thus neither would cut prices below the full monopoly level. Intermediate assumptions, as suggested by Zeuthen, involve limited power to gain business from rivals and lead to intermediate but determinate results. The effect of goodwill attached to brands might be represented in such a way. Introduction of the time element, with inevitable uncertainty as to the permanence of gains acquired through taking the initiative in price cutting, makes all determinate results seem unrealistic. The same is true of the case designated by Zeuthen as partial monopoly, where only one large concern attempts to maintain prices. Such a concern has some measure of power so long as its rivals have limited capacity or supply schedules involving higher costs of production or both—one might add, so long as these rivals have learned that the better part of valor is not to try to supply the whole market. This last would probably fairly represent the typical conditions of "price leadership" but is hardly susceptible of mathematical treatment.

A still more realistic turn might be given the

discussion if the fact were noted that the actual movements of prices take place within the general currents of business cycles. According to abstract theory prices are most likely to be cut when producers are making large profits; whereas actually the heaviest cuts come when producers are already sustaining losses caused by shrinkage in demand and are made for the purpose of restoring in part an unduly shrunken volume of sales.

Another special case is bilateral monopoly, in which a monopolistic buyer purchases from a monopolistic seller or in which two requisites of production jointly demanded are separately monopolized. Here the separate interests of these monopolists can be shown to lead to a smaller supply than even a consolidated monopoly would furnish. Aside from academic interest the main case under this principle is that of a labor union bargaining with a monopolistic employer; but the union has not the same kind of power to limit the supply of labor that the manufacturer has to limit the supply of goods. Aside from very slow trends any rise in wages resulting in reduced demand for labor spells unemployment and increased difficulty in holding the members of the union as well as greater competition from non-union workers.

Goodwill attached to brands occupies a paradoxical position in the theory of monopoly, for the theorist classes it as a monopoly element despite the fact that the promotion of rival brands is the chief form of competition in many industries. The brand gives partial monopoly power if preference for it is strong enough to prevent a considerable number of customers from shifting to other brands when such brands become relatively cheaper. But producers compete in building up these preferences, and there is no reason to suppose that they do not on the average spend as much in advertising and promotion as the results are worth to them individually, let alone what the net resultant is worth to all of them together.

One doctrine often announced by theorists is that monopoly gives its possessor power to discriminate in prices, which is impossible under competition. Thus he can secure a higher monopoly profit than if he were to set one price. But the competition which prevents all discrimination is a non-existent ideal, and actual forms of competition regularly involve discriminations of numerous sorts. The doctrine of non-discrimination has been carried to an extreme by F. A. Fetter, who maintains in a recent volume that

any price system other than a uniform factory price plus actual costs of transportation is a proof that monopoly and not competition prevails. This amounts to assuming that the only real competition is that in which every producer has rivals at his precise point of shipment, and rules out by definition the typical form of manufacturers' competition—that between producers at different localities. Geographical price structures in such cases are indeterminate between bounds set by costs of transport, and one producer may set lower prices rather than higher ones to more distant points. Where such a practice becomes fixed in a stereotyped form, as in the case of the Pittsburgh-plus system of steel prices, it does afford evidence of non-competitive control.

In economic discussions of the effects of monopoly attention is somewhat unduly concentrated on prices and profits. It is true that monopolistic forces are probably able to sustain the level of profits sufficiently to increase the concentration of incomes and so to work some harm in an economy which is growingly dependent on widely diffused purchasing power to furnish the kind of market required for the disposal of the products of mass production. They may even help to sustain the interest rate at levels higher than are justified by the true social productivity of additional capital.

The more important phases of these matters are seen in their relations to class stratification of incomes, to efficiency of production and quality of products and especially to industrial stabilization and to the full use of existing productive powers. In relation to efficiency the development of applied science and organized research has reduced the importance of the competitive stimulus as a spur to the discovery and adoption of the most economical methods. On the other hand, understandings between producers, of a non-competitive character, may retard the introduction of improvements, especially in quality of products, which would cost the producers heavily in obsolescence of existing equipment. It is well known that patents are often bought by a "partial monopoly" in order to keep them out of use. Even if such patents do not embody methods superior to those in actual use by the company, the consumer might gain if they were in the hands of competitors; and such suppression is contrary to the supposed proper operation of both the competitive system and the patent system.

Cartels have long been justified as stabilizers

of industry; and from this standpoint new force has of late been given to the movement for non-competitive control of output by the wave of discussion of the possibility of a "planned economy." To industrialists this naturally means "adjusting output to demand," a phrase which others think a mere euphemism for monopolistic restriction designed to maintain and stabilize profits. On the one side the claim is made that the "anarchic" system of free enterprise is responsible for cycles of prosperity and stagnation; on the other side it is maintained that the paralysis would be less severe if a system of free competition actually prevailed, and that such paralysis is aggravated by the monopolistic and quasi-monopolistic resistances to downward movements of prices and wages when the state of supply and demand makes these necessary to the flow of goods and the full employment of labor. Thus it is claimed that more effective controls of the sort business desires would be likely to make the evil worse rather than better. Perhaps the most serious effect of the present mixed situation is the resultant lack of balance between the industries which contrive some protection against the rigors of competition and those exposed to its full force, in which it becomes difficult at times (as has been the case in agriculture) to make the barest living.

In general, however, if there is a trend in opinion on this question, it is toward remedying the lack of balance by more general organization for control of supply rather than in the other direction. On the other hand, it is urged that the idea that depression can be mitigated by limitation of output is a delusion and that if any organization is to hold out hopes of remedying this evil it must not stop at organizing separately the entrepreneurs in each industry, who are interested in restricting output, but must be broader in both its objectives and its constituency, taking in those groups interested in maintaining output as well as those interested in restricting it.

JOHN MAURICE CLARK

See: COMPETITION; PRICE; DEMAND; SUPPLY; PROFIT; CHARTERED COMPANIES; MONOPOLIES, PUBLIC; COMBINATIONS, INDUSTRIAL; TRUSTS; CARTEL; TRADE ASSOCIATIONS; PRICE DISCRIMINATION; UNFAIR COMPETITION; GOODWILL; PATENTS; PUBLIC UTILITIES; RATE REGULATION; GOVERNMENT REGULATION OF INDUSTRY; PRICE REGULATION; STABILIZATION, BUSINESS.

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MONOTHEISM. See RELIGION.

MONROE DOCTRINE. Considered broadly the Monroe Doctrine is one aspect of the more general principle which assumes that Europe and America constitute two separate and distinct spheres of political activity and that they should have as little to do with each other as possible. This principle is to be found in the utterances of very early statesmen and as regards non-intervention in European affairs was given influential expression in Washington's Farewell Address and in Jefferson's first inaugural. Monroe's message of December 2, 1823, furnished the counterpart to the Farewell Address by placing a ban on European intervention in the New World.

This message had a dual origin. It was to some extent prompted by the pretensions of the Russian government to exclude all but Russian

vessels from the northwest coast of America, north of 51°. There had resulted a diplomatic controversy between the United States and Russia, in the course of which John Quincy Adams as secretary of state laid down the principle that European governments could claim no right to establish new colonies anywhere in the New World, every portion of the territory thereof having already been occupied. Adams' principle was taken over by Monroe, and its exact expression was incorporated in the message of 1823 in the famous words, "the American continents, by the free and independent condition which they have assumed and maintain, are henceforth not to be considered as subjects for future colonization by any European powers." The message was a reaction also to the fear that the continental European powers were planning the reconquest of the Spanish American republics which had declared their independence of Spain. In conversations with Richard Rush, the United States minister in London, George Canning, the British foreign secretary, had expressed the apprehension that the continental powers, having just put down revolution in Spain, would transfer their attention to America. The language of the czar Alexander also led to suspicion of sinister purpose. After long deliberations in the cabinet Monroe and Adams fixed upon a pronouncement which warned against intervention and declared that "we could not view any interposition for the purpose of oppressing them, or controlling in any other manner their destiny, by any European power in any other light than as the manifestation of an unfriendly disposition toward the United States."

The message was received enthusiastically in the United States. It was not generally known that the probability of aggressive action against the Latin American states was extremely slight and that in continental Europe the vigorous pronouncement of Monroe was received with irritation and no little contempt. In the years immediately following 1823, when on four separate occasions Latin American powers sought to secure from the United States fuller commitments looking to the carrying out of the policy enunciated in the message of 1823, such commitments were refused. In the debates in Congress on the so-called Panama Congress of 1826 projected by Bolivar with a view to closer cooperation between American states, opinion in the United States was seen to be emphatically hostile to any political understanding with the new republics. They themselves, while seeking

on occasion the support of the United States, looked rather to Great Britain than to the sister republic of the north.

For some time after 1826 the principles of Monroe's message commanded little attention. There were occasions when they might have been brought forward, such as the British occupation of the Falkland Islands or British encroachments in Central America. But more significant issues than these were required. The intrigues of Great Britain and France to prevent the annexation of Texas to the United States, the quarrel with Great Britain over Oregon and fear of British purposes in California led in the 1840's to the revival of the dogmas of 1823. President Polk gave the most striking although by no means the first expression of this reviving sentiment in his message of December 2, 1845, in which he warned not only against armed intervention but also against diplomatic interference based on the principle of the balance of power and sought to give Monroe's pronouncement special but not exclusive application in the case of North America. The Polk message was well received, but like that of twenty-two years before it was not accorded congressional sanction and produced little effect abroad. In 1848 Polk reiterated his statement, suggesting that the Monroe principle forbade the assumption by England or Spain of a protectorate over Yucatan and that it would be the duty of the United States itself to assume such a protectorate rather than permit such action by a European power. Here for the first time the dogmas of 1823 became the excuse for a proposed measure of expansion. No action was taken, however.

In the 1850's the principles of 1823—first described as the Monroe Doctrine in 1852 or 1853—grew steadily in popularity and became widely known both here and abroad. From a partisan status—for under Polk and his immediate successors the Democrats claimed credit for them, while the Whigs maintained a critical attitude—they rose to the rank of a national dogma. Europeans although hostile for the most part at least knew of the existence of the doctrine. Its validity, however, was denied by Lord Clarendon when Buchanan brought it forward in the diplomatic discussions of the Central American question in 1854.

The doctrine was to receive sharp challenge in the 1860's. Spain took over the Dominican Republic in 1861, and this event was soon followed by French intervention in Mexico and the establishment of an empire in that country

under the Austrian archduke Maximilian. In dealing with the first of these enterprises William H. Seward, then secretary of state, tried unsuccessfully to invoke the Monroe Doctrine. He received a sharp rebuff. In his subsequent prolonged and able correspondence with France, Seward fell into no such error. During the Civil War he pursued a policy of caution, alluding in general terms to the principles of the Monroe Doctrine, and thus keeping the record straight, but attempting no threats. When the war ended, his tone soon began to rise; and as the failure of the enterprise became obvious, from the standpoint of events in Mexico as well as in France, Seward became increasingly emphatic. By the end of 1865 it was apparent that the French would withdraw from Mexico. There can be no question that the attitude assumed by the American secretary of state caused the French government much anxiety and contributed in no small degree to the eventual decision. Throughout the negotiations Seward had been sustained by an immense body of popular opinion. The Monroe Doctrine had become truly national.

Once rooted as national dogma the doctrine was more and more liberally interpreted, often in ways which would have seemed strange to Adams or to Monroe. Before 1870 attempts had been made to link the principle of non-intervention by Europe in American affairs with the principle that territories in the New World could not be transferred from one European power to another, but this principle was most definitely asserted and most closely connected with the Monroe Doctrine in the pronouncements of President Grant. Thereafter it was repeatedly brought forward when cessions of territory seemed imminent. In the late 1870's and early 1880's the doctrine was frequently cited as forbidding the construction by Europeans of a trans-Isthmian canal and still more as implying that such a canal must be under the exclusive guaranty of the United States. Both President Hayes and President Garfield insisted upon this latter point; and in the course of time American opinion compelled the revision of the Clayton-Bulwer Treaty of 1850, which looked toward joint Anglo-American control of any canal constructed, and the signing of the Hay-Pauncefote Treaty, by which Great Britain conceded the American point of view. A still more extraordinary extension of the original doctrine was made by Grover Cleveland in his second administration when in the name of the

principles of 1823 he virtually compelled Great Britain to arbitrate a dispute with Venezuela over the boundary between British Guiana and the Latin American republic. Cleveland's stand produced a serious diplomatic crisis, and if Great Britain had not given way the situation might have become even more critical.

The opening of the twentieth century saw still further developments. American opinion was increasingly sensitive to European action in the New World; but down to 1900 punitive action by European states against unruly Latin American republics had not been followed by American diplomatic protest where no question of conquest was involved. When in 1902 Great Britain, Germany and Italy took united action in the form of a blockade to enforce the claims of their citizens against the Venezuelan dictator, the first impulse of the Roosevelt administration was to refrain from interference. Despite the legend that Roosevelt's vigorous protest compelled arbitration, the dispute was in fact put in the way of settlement without serious pressure from the United States. American public opinion, however, had been unmistakably aroused and may possibly have impelled the administration to press vigorously for the lifting of the blockade. The whole episode added weight to the growing sentiment in favor of preventive action by the United States to forestall European measures of coercion in similar instances. On this basis President Roosevelt in 1905 negotiated a treaty for American control of customs in the republic of Santo Domingo, a treaty finally accepted by the Senate two years later. In his message of 1904 he had stated frankly that chronic wrongdoing by a Latin American state might compel intervention by the United States in order to keep Europe out. The Monroe Doctrine, originally a doctrine of non-intervention, was thus transformed into a justification of intervention. Since 1915 it has frequently been cited officially or unofficially as a justification of interference on the part of the United States with the states of the Caribbean area. At the Peace Conference in Paris in 1919 President Wilson found it necessary in order to placate domestic opposition to the Covenant of the League to incorporate in that document an article declaring that nothing therein contained should affect the legal validity of regional understandings such as the Monroe Doctrine. This statement is probably not the equivalent of European recognition of the doctrine, but its incorporation in the Covenant met with considerable opposition and

its eventual acceptance marks another step in the acquiescence by other powers in the principles connected with the name of Monroe. It was not by any means satisfactory, however, to the more nationalistic supporters of the American dogma, and the feeling that the Covenant violated that dogma was responsible in part for the eventual failure of the United States to enter the League.

Certain reactions against the undue extension of the doctrine have been discernible in the past two decades. Save on special occasions when it directly served their interests, the Monroe Doctrine has never been particularly popular among the Latin American republics; while the assumption of American hegemony by the United States and the growing tendency to use the doctrine as an excuse for selfish economic penetration have aroused active antagonism. Latin American leaders have complained of the fact that the doctrine has been interpreted by the United States alone—a point on which they have never been given satisfaction. Almost every administration since that of Wilson has insisted upon the purely national character of the principles of 1823 and upon the right of this country to determine their meaning and application. Attempts to provide for definition of the doctrine in the sense of an accurate delimitation have invariably failed. Yet some change in attitude may be noted. In an effort to relieve apprehension Secretary of State Hughes set forth at length the principles which governed the United States in dealing with the Latin American republics. He attempted also to justify the increasing number of interventions by the United States in the Caribbean area on the grounds of general international law and to dissociate them from the Monroe Doctrine. The memorandum published by the State Department during the Hoover administration follows the same direction and seeks to limit the application of the famous dogma. In 1929 the Committee on Foreign Relations of the Senate of the United States in transmitting the Kellogg-Briand Pact added a gloss, or separate report, in which the Monroe Doctrine was conservatively interpreted and based upon the principle of self-defense. The Roosevelt corollary of 1904 was definitely excluded.

In the popular mind the Monroe Doctrine has taken deep lodgment. It is likely to be invoked by persons ignorant of its history and interpretation in almost any dispute involving the relations of European and New World states

or even the relations of European states and the United States. The phrase itself serves in many instances as a convenient substitute for thought and as the basis of a successful appeal to prejudice and national feeling.

The intensity of this feeling is now well recognized abroad. It is doubtful whether any European government would today challenge the United States on a question involving the New World and with regard to which the Monroe Doctrine had been invoked; and even the most polite and learned discourses by American political leaders can succeed only partially in banishing the apprehensions which Latin Americans feel as to its possible interpretation. The degree to which the diplomatic or coercive action of European states in the New World should be tolerated by the United States is one on which different opinions might be held and ably defended; but that a powerful emotional complex exists of which statesmanship must take account is not to be denied.

It is perhaps needless to add that in the opinion of the best authorities the Monroe Doctrine is not international law. Its principles may be claimed perhaps as deductions from other principles truly legal, such as the right of self-defense or self-preservation. But it is in essence a national policy, or perhaps it is even better defined as an article of faith which like many others is more easily felt than accurately defined.

DEXTER PERKINS

See: IMPERIALISM; INTERVENTION; PAN-AMERICANISM.

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MONROE, JAMES (1758-1831), fifth president of the United States. By 1782 Monroe had formed an intimate friendship with Thomas Jefferson and begun his political career, which in its early stages was marked by a strong spirit of sectionalism and opposition to the federal constitution. After a short period in the United States Senate (1790-94) he was sent on a mission to France but accomplished little because of the French resentment aroused by the policy of the Washington administration in its attempts to reach an understanding with England. Monroe's excessive republican enthusiasm, which continued to color his political outlook throughout his entire career, soon brought him rebuke and eventually recall. After his return to the United States he entered Virginia politics. In 1803 he was sent abroad again on a diplomatic mission and together with Robert Livingston took the initiative in concluding the Louisiana Purchase treaty with Napoleon.

His subsequent diplomatic career in Spain and England was less successful and in 1807 he returned to the United States. In the following year his presidential ambitions became known and for a time alienated Madison; but after a brief period as governor of Virginia he was appointed secretary of state in Madison's cabinet and during part of the administration served also as secretary of war. In 1816 Monroe was elected to the presidency and he was reelected virtually unanimously in 1820. Throughout his career Monroe reflected rather than molded public opinion. In the presidency he exhibited capacity for administration rather than great qualities of leadership.

Monroe's most important act was the enunciation of the doctrine that has come to be known by his name. On December 2, 1823, he issued the famous message which warned the powers of continental Europe against intervention in or colonization of the American continents. Monroe's sympathy with republicanism was a factor in his declaration. Had it not been for Adams, Monroe would have abandoned the doctrine of the two spheres, for he wished to recommend the recognition of the Greeks at the same time that he warned Europe not to intervene in the former colonies of Spain in the New World. But although John Quincy Adams contributed much to this message, the principle of non-intervention was Monroe's and the message was issued on his own responsibility and partly on his own initiative. In domestic politics Monroe remained a sturdy champion of Jeffersonian

principles and Virginian conceptions of states' rights.

DEXTER PERKINS

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MONTAGU, CHARLES, EARL OF HALIFAX (1661-1715), English administrator and financier. Montagu prepared for holy orders at Trinity College, Cambridge, where he "outshined his contemporaries" in logic, ethics and philosophy. In 1689 he became Whig member of Parliament for Maldon, a constituency which he represented with distinction until he was returned for Westminster in 1695. Although a faithful adherent of the house of Orange and of an arrogant nature he aimed at conciliating monarchical power with democratic principles and constitutional liberties.

Montagu's main achievement was to reorganize public finance and restore public credit. In 1694 the Bank of England was floated under his aegis to provide large internal loans. In 1696 with Newton, Locke and Somers he organized the great recoinage, issuing Exchequer bills to tide over monetary stringency. These interest bearing negotiable government securities became a permanent feature of British finance. He was made chancellor of the Exchequer in 1694 and resigned the post in May, 1699, when his influence had waned. Raised to the peerage in 1700, he successfully fought an impeachment and recovered some of his popularity. Montagu was also one of the founders of a new company trading with India.

R. D. RICHARDS

Works: *The Works and Life of the Right Honourable Charles, Late Earl of Halifax*, ed. by W. Pittis (2nd ed. London 1716).

Consult: Macaulay, Thomas B., *The History of England, from the Accession of James the Second*, ed. by C. H. Firth, 6 vols. (new ed. London 1913-15) vols. v-vi; Andréadès, A. M., *Histoire de la Banque d'Angleterre*, 2 vols. (Paris 1904), tr. by C. M. Meredith, 1 vol. (2nd ed. London 1924) p. 57-59; Richards, R. D., *The Early History of Banking in England* (London 1929) p. 140-45.

MONTAIGNE, MICHEL DE (1533-92), French philosopher. The attempt of Montaigne to comprehend life in its own immediate terms without recourse to religious or metaphysical

postulates derives from the philosophers of late antiquity. Modern science had not yet developed to the point where it could offer an integrating principle to replace the obsolescent religious faith of the Middle Ages. To a type of mind like Montaigne's this principle could be derived only from the concrete data of human experience, which were to be gleaned in part from historical records and the reflections of philosophers but to a greater degree from subjective introspection and attentive observation of the daily flux of life itself. The rule of life which Montaigne most consistently emphasized was that the individual should constantly gird himself against the buffeting of fortune. From this attitude of precaution toward the unknowable forces which threaten to overwhelm man spring Montaigne's political and social preconceptions. Convinced of the wisdom of preserving the institutions and laws handed down by tradition, he was skeptical of all who wished to change the already existent. In the presence of the moral and social manifold with its baffling complexities the mind of man, he held, is helpless. Finding the only safe and reasonable refuge within he recoiled from all efforts to regulate personal activity by external agencies or by artificial norms. He had little in common either with the ambitious aristocratic type of the seventeenth century or with the calculating bourgeois *arriviste* of the eighteenth. Montaigne's personal and intellectual life are the classic embodiment of the recurring type of individual who strives to master life and seeks inner harmony and freedom by fortifying his personality. Many of the basic implications of Montaigne's thought were developed more systematically and given a more didactic tinge by Pierre Charron (1541-1603), whose motto, *paix et peu*, epitomizes his scheme of values.

B. GROETHUYSEN

Works: *Les essais de Michel de Montaigne publiés d'après l'exemplaire de Bordeaux*, ed. by Fortunat Strowski, François Gebelin and Pierre Villey, 4 vols. (Bordeaux 1906-20).

Consult: Strowski, Fortunat, *Montaigne* (2nd ed. Paris 1931); Lanson, G., *Les essais de Montaigne* (Paris 1930); Gide, A., *Essai sur Montaigne* (Paris 1929), tr. by S. H. Guest and T. E. Blewitt as *Montaigne, an Essay in Two Parts* (London 1929); Groethuyesen, B., "Montaignes Weltanschauung" in *Philologisch-philosophische Studien, Festschrift für Eduard Wechsler*, Berliner Beiträge zur romanischen Philologie, vol. i (Jena 1929) p. 219-28; Villey, P., "La place de Montaigne dans le mouvement philosophique" in *Revue philosophique*, vol. ci (1926) 338-59; Armain-gaud, Arthur, "La morale de Montaigne" in *Revue*

politique et parlementaire, vol. cxvii (1923) 452-62, and vol. cxviii (1924) 139-52; Gmelin, Hermann, "Montaigne und die Natur" in *Archiv für Kulturgeschichte*, vol. xxi (1930-31) 26-43; Hunt, R. N. C., "Montaigne and the State" in *Edinburgh Review*, vol. cxlvi (1927) 259-72; Villey, P., *L'influence de Montaigne sur les idées pédagogiques de Locke et de Rousseau* (Paris 1911); Türk, S., *Shakespeare und Montaigne, ein Beitrag zur Hamlet-Frage*, Neue Forschung, no. 8 (Berlin 1930); Bouillier, V., "Montaigne et Goethe" in *Revue de littérature comparée*, vol. v (1925) 572-93; Roy, P., *Les sources de Charron* (Paris 1906).

MONTALEMBERT, COMTE DE, CHARLES FORBES RENÉ DE TRYON (1810-70), French politician, historian and sociologist. A visit to Ireland in 1830, where he met O'Connell, converted Montalembert into a liberal, intent on reclaiming the liberties of the church and the rights of peoples. Deeply influenced by Lammenais, with whom he cooperated in the struggle to bring about separation of church and state, he inclined for a time to consider as a supreme ideal the full and absolute liberty of opinion and needs; but with growing pressure from the Catholic church he retreated to a more orthodox position. The Holy See, although still condemning what it considered vestiges of his former tendencies, was pleased with Montalembert for introducing French Catholics into political life and into the parliamentary sphere and for defending in his speeches and writings the liberties of the church. Montalembert's defense of these liberties on the grounds of the common law and of parliamentary institutions—which he praised in *De l'avenir politique de l'Angleterre* (Paris 1856)—brought about in 1850 the passage of the Falloux law granting liberty of instruction. The same liberties which he sought for the church he also sought for those peoples whom he considered oppressed, especially the Irish and the Poles. His sympathy with the laboring classes in France is revealed by his efforts during the early stages of the industrial revolution in France to secure some measure of legal protection for various types of workers; his famous speech in 1840 on child labor has established his position as one of the early precursors of the social Catholic movement.

Montalembert's *Les moines d'occident depuis Saint Benoît jusqu'à Saint Bernard* (7 vols., Paris 1860-77; tr. as *The Monks of the West*, 6 vols., 2nd ed. London 1896), despite certain minor inaccuracies, marks an era in the social history of religious institutions. Emphasizing such factors as the role played by the monks in

clearing the lands and in impressing on the people the importance and dignity of manual labor, the author reestablished historical truths unappreciated by eighteenth century philosophers who like Condorcet were blinded by the abuses of certain mendicant orders to the social utility of monasticism. The monk as portrayed by Montalembert is not only an apostle of the Gospels but also a commentator on *Genesis*, who presents to the people the earth, that divine gift; who retells them the commandment of God the creator and teaches them the art of practising it. The positivist historical school, represented by Littré in the *Journal des savants* of 1862 and 1863, declared itself in accord with Montalembert in considering the Middle Ages thus understood as "the heroic age of Christian society," while the subsequent studies of Léopold Delisle, d'Arbois de Jubainville, Lamprecht, Dom Besse and Dom Berlière have confirmed this homage.

GEORGES GOYAU

Other important works: *Discours*, ed. by Camille de Meaux, 3 vols. (2nd ed. Paris 1892); *Pages choisies, avec lettres inédites*, ed. by V. Bucaille with introduction by Georges Goyau (Paris 1920).

Consult: Lecanuet, R. P., *Montalembert*, 3 vols. (Paris 1895-1902); Littré, Émile, *Études sur les barbares et le moyen-âge* (3rd ed. Paris 1874) p. 114-94; Calippe, Charles, *L'attitude sociale des catholiques français au XIX^e siècle*, 3 vols. (Paris 1911-12) vol. ii; Soltau, R., *French Political Thought in the Nineteenth Century* (New Haven 1931) p. 81-83, 171-76. See also articles in *Revue générale*, vol. xcv (1912).

MONTANARI, GEMINIANO (1633-87), Italian mathematician and monetary theorist. Montanari was professor of mathematics at Bologna and later professor of astronomy and meteorology at Padua. He was the author of two works on money, *Breve trattato del valore delle monete in tutti gli stati* (1680) and *La zecca in consulto di stato (Della moneta)* (1683-87), which in subtlety and penetration had few equals in their day. Neither, however, was published until seventy years after the author's death. Both were included in the Custodi collection of reprints (*Scrittori classici italiani . . .*, vol. xlv, Milan 1804) and the second was again reprinted in Graziani's *Economisti del cinque e seicento* (Bari 1913, p. 239-379).

Following the lead of Davanzati, Montanari gives what is probably the first clear cut statement of the quantity theory *stricto sensu*, departing to this extent from the more widely held view of Bodin. In their non-monetary uses the

precious metals are valued like other things according to their scarcity relative to the "need, esteem, and desire" which men have for them, and Montanari seems to imply that their values in the two uses tend to be equalized. He rejects the idea that the ratio between gold and silver may be regarded as practically permanent; new supplies from America, use in the arts and the drain to the East cause it to fluctuate. A sturdy opponent of debasement, Montanari describes with great skill its effects upon industry and the public revenues. He concedes the debasement of subsidiary coins, but only within safe limits. His discussion of the problem of fixing the mint ratio and his exposition of the working of Gresham's law show much insight. Because of his general emphasis on scarcity and the subjective factor in the determination of value, Montanari is considered by some as the precursor of the psychological school in economics.

A. E. MONROE

Consult: Graziani, Augusto, *Le idee economiche degli scrittori emiliani e romagnoli sino al 1848* (Modena 1893); Monroe, A. E., *Monetary Theory before Adam Smith* (Cambridge, Mass. 1923); Arias, Gino, "Les précurseurs de l'économie monétaire en Italie" in *Revue d'économie politique*, vol. xxxvi (1922) 743-50.

MONTCHRÉTIEN, ANTOINE DE, SIEUR DE VATTEVILLE (c. 1575-1621), French economist, dramatist and poet. Montchrétien had already written several of his tragedies, which enjoyed great popularity and have some intrinsic merit, when he was forced to flee to England to escape the consequences of a duel. Subsequently he visited Holland, and after returning to France shortly before 1610 and entering upon the career of a hardware manufacturer he embodied the results of his extended observations in his *Traicté de l'oeconomie politique* (Rouen 1615; new ed. by T. Funck-Brentano, Paris 1889), which he dedicated to Louis XIII and the queen mother, Marie de Médicis. He was killed while attempting to organize a Huguenot uprising in Normandy, although he is not definitely known to have adhered to the reformed religion.

While Montchrétien created the term political economy, his tract lacks the remotest resemblance to a scientific work. It is a rather poorly arranged, stylistically undistinguished compilation of economic observations, coupled with practical proposals for an economic policy and replete with digressions and irrelevancies. Both the originality and the influence which have been attributed to it by various writers since its resurrection in the latter part of the nineteenth cen-

tury represent a vast exaggeration. Montchrétien borrowed heavily from Bodin and seems totally unaware of the writings of his famous compatriot Laffemas. The principal interest of the *Traicté* lies in the fact that as a record of the economic and industrial state of France in 1615 it constitutes a precious document for economic historians. A typical mercantilistic pamphlet, it is motivated by the author's interest in French economic growth and by his desire to prevent foreigners from participating in the benefits. Montchrétien is, however, free from the mercantilistic practise of measuring national wealth by the supply of gold and silver. His program bases the wealth of the state upon the product of the labor of its citizens. In the first section of his work he treats of industry, which he depicts as the first consideration in national economic development. After lauding the abilities of French artisans and the richness of French resources he suggests state intervention to assure the growth of powerful native industries in iron, wool, silk, leather, glassmaking and printing; state assistance to French workers; and the exclusion of foreign workers. In the second section he discusses commerce, demonstrating that France lags woefully behind its neighbors in shielding native merchants from foreign competition, demanding that it take advantage of its potential economic independence of other nations and recommending heavy export duties on French raw materials and the prohibition of imports in manufactured articles. In the third section he unveils spacious vistas for the future activity of Frenchmen in the field of colonization.

PAUL HARSIN

Consult: Bousquet, G. H., *Essai sur l'évolution de la pensée économique* (Paris 1927) p. 9-12; Cole, C. W., *French Mercantilist Doctrines before Colbert* (New York 1931) p. 113-61; Funck-Brentano, T., Introduction to his edition of the *Traicté*, p. i-cxvii; Dessaix, P., *Montchrétien et l'économie politique nationale* (Paris 1901); Lavalley, P., *L'œuvre économique de Antoine de Montchrétien* (Caen 1903); Harsin, P., *Les doctrines monétaires et financières en France du XVI^e au XVIII^e siècle* (Paris 1928) p. 75-77; Ashley, W. J., *Surveys, Historic and Economic* (London 1900) p. 263-67.

MONTEFIORE, SIR MOSES (1784-1885), Anglo-Jewish philanthropist. Born of Italian parentage settled in London in the middle of the eighteenth century, Montefiore played an important role in the banking world until 1821, when he retired to devote himself to public affairs. He was sheriff of London in 1837 and was made a baronet in 1846. Sir Moses was allied by

blood and financial interests to the Rothschilds and other Anglo-Jewish leaders, with whom he took a foremost part in the movement for the civil and political emancipation of the Jews in England. As president of the Board of Deputies of British Jews from 1835 to 1874 he played a leading part in the efforts of Anglo-Jewry to improve the condition of Jews in various parts of the world. This work based on current liberal and philanthropic theories had two aspects: the westernization of Jews in backward countries and the wiping out of legislative and administrative discrimination against them. His successful intervention in the Damascus blood accusation case of 1840 was the first impelling force toward international Jewish solidarity in modern times. His subsequent missions between 1846 and 1872 to Russia, Rome, Morocco and Rumania on behalf of persecuted Jews added to his international reputation. He visited Palestine seven times between 1827 and 1875, was deeply interested in the project of Jewish resettlement and ushered in a new epoch of Jewish nationalism, which took an economico-political turn with the later rise of Zionism. His exceptional personal standing helped win the support of the British government for the diplomatic endeavors of himself and his board and encouraged the development of an informal tradition of British protection of Jews in the Turkish Empire which later affected British policy in the question of a Jewish National Home in Palestine.

PAUL GOODMAN

Consult: Diaries of Sir Moses and Lady Montefiore, ed. by L. Loewe, 2 vols. (London 1890); Wolf, Lucien, *Sir Moses Montefiore* (London 1884); Wolbe, Eugen, *Sir Moses Montefiore* (Berlin 1909); Goodman, Paul, *Moses Montefiore* (Philadelphia 1925), with complete bibliography.

MONTEMARTINI, GIOVANNI (1867-1913), Italian economist and reformer. A classmate of Cossa at the University of Pavia, Montemartini later studied under Carl Menger at Vienna and under Pantaleoni at Rome. He was professor of economics at Pavia and Rome, editor of the *Giornale degli economisti* from 1904 to 1910 and author of many articles in this magazine and in *Critica sociale*.

Through the Ufficio del Lavoro della Società Umanitaria, which he founded in 1902 at Milan, he investigated various aspects of the labor problem. He created in 1903 the national labor office of the Ministry of Agriculture, Industry and Commerce, through which he conducted research preparatory to the drafting of social

legislation; and in 1905 with Pantaleoni and de Viti de Marco he examined for the government the Lubin proposal for an International Institute of Agriculture. In 1911 he reorganized the government's general statistical bureau. Montemartini was the leading theorist of the municipal reorganization and municipal ownership movements and a president of the Federazione Nazionale delle Aziende Municipalizzate. A member of the Social Democratic party, he approached social problems from the point of view of the English Fabians to a degree unusual on the continent.

BENVENUTO GRIZIOTTI

Important works: Municipalizzazione dei pubblici servizi (Milan 1902, 2nd ed. 1917); *Il risparmio nella economia pura* (Milan 1896); *Teorica delle produttività marginali* (Pavia 1899); *Lezioni di economia pura* (Rome 1905); *Le curve tecniche di occupazione industriale*, Italy, Direzione Generale della Statistica e del Lavoro, Annali di Statistica, 5th ser., vol. i (1912).

Consult: Agnelli, Arnaldo, "In memoria di Giovanni Montemartini" in *Giornale degli economisti*, 3rd ser., vol. xlix (1914) 377-88.

MONTESQUIEU, BARON DE LA BRÈDE ET DE, CHARLES DE SECONDAT (1689-1755), French political theorist. Montesquieu's political writings cover the generation of intellectual transition during which the rigidity of French classical thought was yielding to the new currents of English philosophy and natural science. Priding himself on his sense of moderation and balance, he drew without compunction on both traditions. In the spirit of Bacon he amassed, diligently if not critically, a wealth of empirical data but did not feel called upon to disclaim the broader deductive principles of Cartesianism. He recognized the basic soundness of the environmentalist position as it had been sketched by numerous writers of antiquity and post-Renaissance Europe and devoted his chief efforts to elaborating and refining their rather intuitive formulae regarding the influence of natural environment on the culture of a particular people; but he did not abandon altogether the older faith that in spite of wide regional variations there was a higher rational principle on which could be predicated universal norms.

In his earliest and least earnest work, the *Lettres persanes* (2 vols., 1721), he approaches the problem of the relation between personal and impersonal factors in history from the optimistic viewpoint of the early Enlightenment. That man, thanks to his rational faculties, can free himself from the sway of nature and prejudice is illus-

trated in the half ironic, half utopian sketch of the troglodyte state. In Montesquieu's next work, *Considérations sur les causes de la grandeur des romains et de leur décadence* (1734), mankind tends to be obliterated in the play of vast impersonal forces which work themselves out inexorably in the course of history. The decrees of kings, military victories and defeats, the relationships between ruler and ruled, become but incidental phases in the flowering and decay of the seminal principle of Roman life.

The attempt to strike a satisfactory balance between personal and impersonal factors is likewise the motive of Montesquieu's most enduring work, *De l'esprit des lois* (2 vols., 1748), in which he conceives the spirit of laws as those interrelationships existing between the laws of a state and the various types of factors, material and ideal, which intermingle, in a highly complex pattern, to mold the "esprit général" of a society. Sensitive to the delicate complexity of these organic relationships, Montesquieu was led to a position of skepticism regarding the capacity of the individual lawgiver to effect sudden improvements in the existing body of law. Even though on rational grounds radical changes might seem called for, the wise legislator, out of respect to the realities of the present and the accumulated wisdom of the past, will rest satisfied with the next best and even with that which is least undesirable.

In the course of his attempt to correlate the laws of a state with the material and ideal factors governing the life of the society, Montesquieu postulated, in the approved manner, three types of government—republic, despotism and monarchy; these in turn he derived from three deeper lying principles, largely moral and emotional in character but with roots traceable in many cases to fundamental geographic, and geographically determined economic, factors. Although as an unrepentant stoic and pupil of Polybius he felt a recurring nostalgia for the patriotic *virtus* on which rested the democratic institutions of the Roman Republic, he gave no indication of an unrealistic desire to transplant them from the soil of the neighborly city-state of antiquity, long since passed away. The prevalence of fear throughout a society, which constituted for Montesquieu the prerequisite for despotism, could be explained, as in the case of his somewhat inaccurate oriental examples, by climate and climate conditioned customs and institutions or, as in cases nearer home, by an inevitable tendency of the true monarchy to relapse into

despotism as a result of the decay of that general sense of honor on which are built vigorous monarchical institutions.

In attempting to draw a line between despotism and monarchy proper Montesquieu went far beyond older political theorists, although he was not unaware of the observations of Polybius and Locke regarding the division of powers within a government. With an ever realistic, although not altogether disinterested, eye on the current struggles of the privileged aristocratic groups in France to stem the tide of royal aggression, he came to regard despotism less as a type than as a tendency, and sought escape therefore, not so much in the enumeration of abstract rights and formal guaranties as in the healthy functioning of aggressive intermediate groups, which in defending their own privileges and prerogatives should through the clash of living forces check the tendency toward despotism and at the same time guard against the predominance of any single corporation. Conversely, liberty became less a transcendental essence, emanating from a mythological state of nature in a remote past, than an immanent principle finding repeated substantiation through the interplay of equally balanced rival powers within the state.

The middle of the road position on which Montesquieu prided himself is a primary cause of his enduring influence. Although his system as a whole, by reason of its complexity and elasticity, tended to elude most of his contemporaries, it was studded with neatly turned maxims and formulae and amply documented theses which could be adapted to substantiate a variety of claims. The mid century liberals, while chiding Montesquieu's tendency to become lost in the particular and the relative, were intrigued in the main by his graceful apostrophes to liberty and the right of remonstrance; his enthusiasm for British institutions; his skilful thrusts at despotism, slavery, religious intolerance, arbitrary fiscal policies and inhuman penal codes; and perhaps above all by his lyrical eulogy of commerce as a stimulus to the spread of civilization and cosmopolitanism. His elaborately developed thesis of the Germanic origins of liberty and his recognition, however ambiguous, of the right of representation lent themselves to adaptation by a more democratically minded generation of libertarians, such as Mably, who sought to justify on historical grounds the doctrines of popular sovereignty and popular participation in government. The nobility, engaged in that increasingly strenuous offensive against the mon-

archy which was to provide the opening chapters of the French Revolution, repeatedly invoked the authority of Montesquieu to justify the privileges and prerogatives of a hierarchic order, while the defenders of the harassed monarchy invoked the letter, if not the spirit, of his chief work to prove the "subordination and dependence" of the aristocracy. When the third estate, after a rather prolonged wavering between its dread of despotism and its more traditional antipathy to the feudal orders, finally in 1789 decided to take over the revolution into its own hands, it set out along the uncluttered paths cleared by the doctrinaire critics of Montesquieu and recently blazed by the American colonists.

Although many of these antitraditionalist presuppositions have continued to inspire liberal ideology and rhetoric, the more realistic problems involved in setting up a working constitution have been the primary factor in perpetuating the influence of Montesquieu. When it became apparent, in France as well as in America, that the phraseology of natural rights was opening the door to less responsible elements in the population, the doctrine of the balance of powers, as abstracted from Montesquieu by Blackstone and Delolme, recommended itself as at least one means of insurance against domination by a mass controlled legislature. In the post-revolutionary period the revived prestige of British institutions and the growing alarm in a number of individualist quarters concerning the popular sovereignty corollary of an all powerful legislative majority opened the way to a widespread dissemination, particularly among the constitution makers in France and Germany, of the abbreviated, Anglicized version of Montesquieu's basic theory.

To a more limited extent, although with far less abstraction, Montesquieu's influence has been perpetuated by the more intellectual and more openly conservative groups deriving from the romantic reaction against the artificial codifications of the revolutionary assemblies. His sense, however incipient, of the complexities of the social organism, of the interrelations between society and state, of the creative faculty of the national folk spirit, of the sanctity of traditional norms, of the identity of interests as between individual and collectivity, of the interplay between absolute and relative, of the balance between ideal and material forces and of the half irrational factors determining the genesis of primitive Germanic and mediaeval legal institutions has struck a responsive chord among the

social and legal philosophers as well as the conservative apologists of a new intellectual order. With an enthusiasm withheld from any of his fellow *philosophes*, he has been offered the sustaining hand of a later and better equipped scholarship and accorded a rank little below that which he enjoyed in his own rationalistic age.

PETER RICHARD ROHDEN

Consult: Dedieu, Joseph, *Montesquieu et la tradition politique anglaise en France* (Paris 1909), and *Montesquieu* (Paris 1913); Carcassonne, Élie, *Montesquieu et le problème de la constitution française au XVIII^e siècle* (Paris 1927); Faguet, Émile, *La politique comparée de Montesquieu, Rousseau et Voltaire* (Paris 1902); Lipschütz, Michael, *Montesquieu als Geschichtsphilosoph* (Strasbourg 1927); Klemperer, Victor von, *Montesquieu, Beiträge zur neueren Literaturgeschichte*, n.s., vols. vi-vii, 2 vols. (Heidelberg 1914-15); Martin, Kingsley, *French Liberal Thought in the Eighteenth Century* (London 1929) ch. vi; Grant, A. J., "Montesquieu" in *The Social and Political Ideas of Some Great French Thinkers of the Age of Reason*, ed. by F. J. C. Hearnshaw (London 1930) ch. v; Michel, E. F., *Die anthropogeographischen Anschauungen Montesquiens* (Bensheim 1915); Fuchs, Vera, *Die strafrechtlichen Anschauungen Montesquiens und Friedrichs des Grossen* (Zurich 1924); Cattelain, Fernand, *Étude sur l'influence de Montesquieu dans les constitutions américaines* (Besançon 1927); Fickert, Artur, *Montesquieu und Rousseaus Einfluss auf den Vormärzlichen Liberalismus Badens*, *Leipziger historische Abhandlungen*, vol. xxxvii (Leipzig 1913); Bonno, Gabriel, *La constitution britannique devant l'opinion française de Montesquieu à Bonaparte* (Paris 1931); Meinecke, Friedrich, "Montesquieu, Boulainvilliers, Dubos" in *Historische Zeitschrift*, vol. cxlv (1931) 53-68.

MONTFORT, SIMON DE, EARL OF LEICESTER (1208?-65), English constitutional reformer. Montfort was the son of the leader of the Albigensian crusade and Amicia, elder sister and heiress of Robert, fourth earl of Leicester. The earldom of Leicester ultimately came to him in 1231. His position among the English baronetage was rendered secure by his marriage with the sister of King Henry III in 1238. As steward of Gascony from 1248 to 1254 he made many enemies by his drastic conduct of affairs and gradually alienated the king, who was jealous of him on personal grounds. Association with Robert Grosseteste and the Franciscan Adam Marsh reenforced Montfort's growing opinion that arbitrary power and government in which the governed took no share were intolerable. These convictions brought him into line with a group among the English baronetage which was becoming increasingly dissatisfied with Henry III's government. The king's acceptance of the Sicilian crown for his son Edmund, the rapacity of his administrators and the absence of any clear

direction in royal policy precipitated the coup d'état of 1258 which substituted a baronial council for royal autocracy. No evidence exists, however, that Simon considered the Provisions of Oxford, which established baronial government, to have gone far enough. His sympathies were with the knights, vavasors and burgesses, whose claims the Provisions of Westminster in October, 1259, were designed to meet; and while baronial leaders were for controlling the crown, much circumstantial evidence points to Montfort's desire to encourage in the government of the shires the smaller local landholder. When the more conservative section of the reforming baronetage drew back after Henry III had secured absolution from his oath to the Provisions of Oxford, Montfort came forward as the leader of a more radical party. Challenging the king's government he defeated Henry and Prince Edward at the battle of Lewes and in the *Forma regiminis* established a provisional government; the chief event of this was his summoning of a Parliament on January 20, 1265, to which the sheriffs were "to cause to come" two knights from each shire, while two deputies were summoned from Lincoln, York "and the other boroughs of England." This was the first time that representatives of the urban populations were summoned to Parliament. Although the summons of knights and burgesses was undoubtedly intended to strengthen the coalition of which Montfort was leader and although the Parliament was obviously selective, the precedent was set. The new government was brought to an end by the victory of Prince Edward and the lords marchers at Evesham in August, 1265, and Montfort's death in battle. The records of the fierce reprisals which followed and of the unrest throughout the country during the next few years testify to the support given to Montfort by the local gentry and townsmen of England.

E. F. JACOB

Consult: Bémont, Charles, *Simon de Montfort, comte de Leicester, sa vie . . . , son rôle politique en France et en Angleterre* (Paris 1884), English ed. by E. F. Jacob (Oxford 1930); Jacob, E. F., *Studies in the Period of Baronial Reform and Rebellion, 1258-1267* (Oxford 1925); Treharne, R. F., *The Baronial Plan of Reform, 1258-1263* (Manchester 1932); Tout, T. F., *Chapters in the Administrative History of Mediaeval England*, Manchester University, Publications, Historical Series, nos. 34-35, 48-49, 57, vols. i-v (Manchester 1920-30) vol. ii; Pasquet, D., *Essai sur les origines de la Chambre des communes* (Paris 1914), tr. by R. G. D. Laffan (Cambridge, Eng. 1925).

MONTES DE PIÉTÉ. *See* PAWNBROKING.

MOONEY, JAMES (1861-1921), American ethnologist. While employed on the Richmond (Indiana) *Palladium* Mooney developed an intense interest in the American Indians. In 1885 he planned to go to Brazil in pursuit of his hobby when he met in Washington J. W. Powell, the director of the Bureau of American Ethnology, who gave him a position on the bureau staff which he held until his death. Mooney's subsequent studies, devoted mainly to the eastern Cherokee and the Kiowa but also dealing with the Cheyenne and other Plains tribes, are notable contributions to the knowledge of Indian life in aboriginal times and of the peyote cult. His general conclusions regarding the Indian populations north of Mexico, which have been made the basis for all subsequent work on the subject, were published after his death.

Mooney was a field worker and a student of Indian history rather than an anthropologist in the present connotation of the term, but indirectly he contributed much to the progress of academic anthropology. He was one of the first American anthropologists to maintain that there was at least one exception to a universal primitive matriarchate, stating that no trace of any such stage was to be found in the Kiowa organization. His extensive report on the ghost dance religion is widely regarded as the type study of a messianic movement among primitive people.

JOHN R. SWANTON

Important works: *The Siouan Tribes of the East*, Bureau of American Ethnology, Bulletin, no. 22 (Washington 1894); *The Aboriginal Population of America North of Mexico*, Smithsonian Miscellaneous Collections, vol. lxxx, no. 7 (Washington 1928); "The Ghost-dance Religion and the Sioux Outbreak of 1890" in Bureau of American Ethnology, *Fourteenth Annual Report 1892-93*, 2 pts. (Washington 1896) pt. ii, p. 641-1103. *Consult:* *American Anthropologist*, vol. xxiv (1922) 209-14, containing a bibliography of Mooney's printed works.

MORALE. Group morale is group persistence in the pursuit of collective purposes. Evanescent enthusiasm is no evidence of morale, although enthusiasm may strengthen it. Tenacity in the face of adversity is the most unequivocal index of high morale, although one of the many shadings of the word covers efficient and upright service in unspectacular situations.

Since morale depends upon subordinating the plurality of individual possibilities to the unity of collective purposes, all that aids in identifying the person with the group symbols is pertinent to the understanding and management of mo-

rale. Group symbols include terms which name the group, indicate its goals and methods and sustain its hope of victory. Primitive communities quite spontaneously use many ways of stimulating the process of identification. The war dances and the magical rites which arouse individual impulses reorganize them about the leaders, emblems and projects of the whole. Modern industrial society has extended its technical attitude toward material things to include human relations, and the building and maintenance of morale have become a distinct social technique with many resources at its disposal. The devices of psychology, social welfare and public health are variously used in factory, school, press, public gathering and other approaches to public opinion in order to mobilize the community in war, disaster and depression.

It is less difficult to evoke than to sustain mass action, since the individual displays many degrees of conscious and unconscious rebellion against subordinating his life completely to a common project. Obviously the problem is most acute when the group is weak or makes little progress or suffers severe setback. Impulses which are not discharged against the out group turn back against the group itself. Indeed an instant and overwhelming threat to security, such as a surprise attack by an armed enemy under cover of darkness, may dissolve all the bonds of attachment to the symbols of the group and leave the desocialized individuals in a wild scramble for safety. When the situation is less acute a sag in group morale may be taken up by diverting attention to a new and weaker enemy. So a crusade against the rich peasant may temporarily supersede a preoccupation with foreign enemies. When the enemy cannot be readily changed, fresh interest may be aroused by giving the same "objective" situation a symbolic redefinition. So it may be said that the struggle has entered a new and portentous phase and that the war has ceased to be an ordinary conflict; it is a crusade to make the world safe for this or that. Accumulating hostilities to the purpose in hand may be disposed of also by means of incidental activities that do not interfere substantially with the overt acts upon which the future of the enterprise depends. Sexual indulgence, intoxication and diverting spectacles are among the means through which inconvenient tensions may be discharged. Many of these activities violate the moral standards (mores) of the group, yet they become tolerated as a kind of allowed licentiousness (countermores). No

groups, from armies to students, can be held to "relevant" effort without opportunities for the "irrelevant."

One of the special problems which arise in connection with the channels of "irrelevance" is the extent to which hostilities may be permitted expression in direct verbal criticism of the policies and leaders of the group. It is evident that decisive action in a crisis demands central command and implicit obedience; it is equally evident that men inured to democracy are inclined to resent arbitrary commands. Western civilization has witnessed so many concessions to individual assertiveness that concessions are nowhere to be avoided, not even in the military establishments.

Experience shows that "harmless" means of dissipating tensions do not eradicate some serious attacks upon the integrity of the group. A leader may be publicly and pointedly insulted; no alacrity may be shown in the execution of apparently reasonable orders. Such acts are breaches of discipline in the actual as well as in the formal sense of the word. They demand treatment which will strengthen rather than weaken the morale of the entire group. If substantial measures are taken, such as imprisonment, mutilation or execution, the group conspicuously loses some of its possible assets. It is for this reason that ceremonial as distinguished from substantial methods of reincorporating the erring one within the group remain important. Ceremonies of repentance and forgiveness in family, religious, party and miscellaneous group relations powerfully aid in sustaining morale. Yet the role of the ceremony is very complex, since merely ceremonial methods of dealing with a breach may stimulate further breaches, sometimes by failing to satisfy the individual's unconscious desire for punishment. In the latter case he is driven to further aggressions against the prevailing order so that he may provoke the substantial punishment which relieves his unconscious sense of guilt.

Since every collective enterprise may be considered in relation to morale, any discussion of the subject threatens quickly to reach a degree of generality which deprives it of much value unless brought in relation to typical situations. The building and maintenance of morale in war time are the problems around which the largest literature has grown.

Among the factors which contribute to low morale in the army are bad nourishment and fatigue, isolation, darkness and suspense. Marked

disproportion between effort and result, continued failures and real or imagined inferiority also produce serious disturbances to morale. When an environment gets a bad name, like "Hell's Kitchen" in New York, suspense increases at every evidence of indecision on the part of the command. Indeed the terse formula runs, "Order, counterorder, disorder." Thus the higher in the scale of command fear or indecision is produced by the enemy, the more disastrous is the demoralization of the troops. Fear among the men shows itself in many forms, from that diffuse state of uneasiness when they begin to get "rattled" and any adverse event exerts an undue influence to the extreme of terror, which is characterized by a loss of self-control and exhibits itself in utter helplessness or panic. In the intermediate states of fright the men show many physical or mental symptoms of disorganization, but they are nevertheless able to master themselves sufficiently to perform their tasks.

The control of fear may proceed by diverting attention from the immediate danger by courageous example, by working men up beforehand to a full realization of their peril and to the acceptance of the situation once and for all, by stimulating a belief in fatalism, by encouraging religious belief in a life after death, by familiarity and friendship between officers and men. The nature of command has been somewhat redefined, as indicated by the French formula *Commander, c'est aider*, under the influence of modern psychology and modern individualism. The high command today is at such a remove from the troops that propaganda must be extensively used in order to maintain confidence. In some respects the role of the officer in immediate contact with the men has grown in importance, and the modern officer's training emphasizes the psychological aspects of his function.

Large modern armies include many personalities who are particularly unfitted without special attention to endure the stress of fighting. Mental disorders (particularly the neuroses) have become conspicuous problems. In general it seems that the less literate and intelligent soldiers develop bodily symptoms (hysteria), while the more literate and intelligent develop obsessional and similar neuroses in which the symbolizing functions play a prominent part. For the latter modern psychopathology is particularly well adapted even as a preventive measure, since a greater degree of self-understanding may enable the individual to detect the irrelevant

nature of many of his incipient escapes from the reality around him.

A high morale among the non-fighting population is imperative during modern warfare, since the front is vitally dependent upon the factory hand and the farmer and since rapid communication enhances the importance of civilian attitudes in relation to the soldier. To maintain such a morale a wide and often highly organized use is made of the techniques of propaganda and censorship.

With the intensification of intergroup conflict in modern society the maintenance of public morale in both war and peace becomes particularly important if the status quo is to be preserved. In maintaining the morale of the whole in the face of a disaffection in some of its parts the governing powers are faced, however, with the conflict of two opposing purposes—the maintenance of the nation as a fighting entity and the rigorous suppression of what are considered dangerous elements. Military leaders must decide, for example, whether mass military training stimulates patriotic indoctrination more than it puts arms and skill in the hands of disaffected elements in the community, such as some elements among the peasantry in the Soviet Union and among the city wage earners in western Europe.

The problem of maintaining morale is very grave also during crises other than war, such as disaster and depression. But during such times as economic crises it is difficult under a system of undirected individualism to define issues with the clarity and general emotional appeal which would make them effective as focusing points for morale. In large social units, the general recognition of violence as a means of settling international difficulties serves even in peace time to maintain a certain working consensus regarding the symbols of collective purpose, which is the primary requisite of morale.

HAROLD D. LASSWELL

See: PROPAGANDA; CENSORSHIP; WAR; MILITARY DESERTION; MUTINY.

Consult: Hall, G. Stanley, *Morale* (New York 1920); Maxwell, W. N., *A Psychological Retrospect of the Great War* (New York 1923); Lasswell, H. D., *Propaganda Technique in the World War* (New York 1927); Bartlett, F. C., *Psychology and the Soldier* (Cambridge, Eng. 1927); Hellen, G. von der, *Die Erziehung zum Soldaten* (Graz 1931); Lebaud, P. C. E., *Maniement moral de la troupe* (Paris 1924); Manceau, Émile (Émile Mayer), *La psychologie du commandement* (Paris 1923); Brousseau, A., *Essai sur la peur aux armées 1914-1918* (Paris 1920); Wardle, M. K., "Notes on Fear in War" in *Army Quarterly*, vol. iv (1922) 263-73.

MORALES, AMBROSIO DE (1513-91), Spanish historian and archaeologist. Morales, who became a cleric, received a humanistic education at the universities of Salamanca and Alcalá and taught at the latter institution. His erudite dissertations, polemics and other writings cover linguistic, hagiographical, archaeological and historical subjects. Morales was very devoted to Philip II, who appointed him royal chronicler in 1563 and provided him with all facilities for the consultation of documents. His historical writing is characteristic of the interest of the Iberian peoples, inspired by the Renaissance, in the investigation of their ancient history and achievements. Morales' principal work is the continuation of Florián de Ocampo's *Corónica general de España*; like Ocampo, he identified Spanish antiquity with Roman history, and beginning with a discussion of the social conditions under the republic he carried the account from the midst of the Punic Wars to the termination of the Leonese monarchy with Bermudo III. He lacked feeling, animation and artistic sense, but he was more critical than Ocampo both in the choice of sources and the appreciation of events. His chief claim to originality lies in the great importance he assigned to such non-literary sources as geography, archaeology, epigraphy and numismatics. While he gave considerable attention to ecclesiastical history and hagiography in the chronicle, Morales displayed to a marked extent the awakening interest of scholars in facts of everyday life which appeared in his period; illustrative of this attitude are his panegyrics on the Castilian language.

FIDELINO DE FIGUEIREDO

Works: Ocampo's *Corónica general de España*, continued by A. Morales, 7 vols. (Alcalá 1574-86; new ed., 10 vols., Madrid 1791-92, of which vols. iii-x are by Morales); "Discurso sobre la lengua castellana" in *Las obras del maestro Fernan Perez de Oliva*, ed. by A. Morales (Madrid 1586); *Apologia en defensa de los Anales de Gerónimo de Zurita* (Saragossa 1610); *Viaje de Ambrosio de Morales* (written 1573; ed. with notes and biography by Henrique Florez, Madrid 1765).

Consult: Redel, Enrique, *Ambrosio de Morales, estudio biográfico* (Cordova 1909); Andrés de Uztarroz, Juan Francisco, and Dormer, Diego J., *Progresos de la historia en el reino de Aragon* (new ed. Saragossa 1878); Miguélez, Manuel F., *Catálogo de los códices españoles de la Biblioteca del Escorial*, vols. i-ii (Madrid 1917-25) vol. i, p. xxxii-xxxv.

MORALS. Until rather recent times morals were not distinguished from manners. Together with ceremonials they were techniques of behavior believed to be efficacious in securing

goods and averting evils. They were judged by identical standards as right or wrong. In the course of time, manners came to be identified with techniques recognized to be manifold, changeful and contingent; morals with a system presumed to be single, unchanging and necessary. They were called and they still are in certain quarters not morals but *morality* and were ascribed to universal principles of right conduct endemic to mankind.

The pluralization of morality into morals follows upon the recognition that morality also consists of manifold, changeful and contingent techniques of conduct. Considered thus morals so largely overlap manners, folkways, mores, law, ethics and public opinion that only convention or fiat decides where these others leave off and morals begin. Contemporary opinion tends to confirm William Graham Sumner in distinguishing folkways and customs as group habits; law as such habits found or ordained, but enforced by police power; ethics as a corpus of rules derived by reflection upon morals; and morals themselves as "the sum of taboos and prescriptions in the folkways by which right conduct is defined."

"Right" is the differentia of the moral. A term of selection, it designates group approval as against group disapproval and implies instrumentalities to enforce the approved and to punish the disapproved. The character of the coercive agency decides the classification of the conduct involved. If that be political, the "right" thing is a matter of law; if ecclesiastical, a matter of religion; if public opinion, a matter of use and wont, convention or fashion. Occasionally the "right" thing is the same for all institutions. Oftener there are conflicts; distinctions are at work. People are described as morally bound and legally free, morally guiltless and legally responsible, moral victors and actual losers, and vice versa. Very widely morals are identified with sexual habits, "moral" and "immoral" being so much identified with sex conduct that bad citizens and unscrupulous business men are condoned as "good husbands and fathers."

So great is the diversity of patterns and principles of conduct that actually comes under the scope of morals that it is impossible to analyze the subject matter scientifically on the basis of a single rule or formula. Even the biological "instinct of self-preservation" fails to embrace all morals, since there are societies—as in China or Japan—which require suicide in certain contingencies; and all societies require murder and

self-immolation in war times. Nor is the survival of the community as distinguished from the survival of its members an adequate criterion, since—as always under the Buddhist or Christian monastic rule and occasionally in the moral economy of every society—ways of life are required which undermine the health and stunt the growth of the community. "Right" does not apply to the function of conduct but to its form. Regarded from the standpoint of vital function morals are secondary and tertiary characters, related to primary ones, often as certain phases of instinctive behavior in insects are related to insect survival or as the plumage of peacocks, pheasants and birds of paradise is to the actual conditions of the birds' lives. They are cancer-like excesses of vitality, stereotyped, and not only add nothing to vital function but often actually conflict with and nullify survival. The rules of kinship and marriage among primitives and Catholics, the rules of property among moderns, express formations of this kind. Together with other moral forms they present themselves as divergent and stereotyped patternings of activity starting from one or more of the primary drives of the psychophysical organism.

Explanation of morals in terms of use is necessarily forced and artificial. They appear to be rather configurations built up as reveries and dreams are built up by a sort of self-pyramiding upon a dynamic affectional ground and a dynamic situational content which carry them as woman's body carries stays and bustles and ruffs or a soldier's body carries a uniform. As Huxley observed: "The notion that the doctrine of evolution could furnish a foundation for morals, seems an illusion." Whatever accidental experience morals begin in, their growth and survival are not due to natural selection and superior fitness.

In morals function follows form rather than form function. To the determinants of both which men share with animals must be added memory, imagination and speech. "Right" conduct, the correct manner of obtaining good and avoiding evil, is postulated upon an imaginary, unseen world of gods and ghosts and demons and upon a living past as well as upon the social and natural environment. "The necessities of life," which are at the core of all goods and evils, are believed contingent on all three realms. Necessities are not such through being indispensable to survival; for example, air is, but even in these days of elaborate ventilation sys-

tems air, unlike people and property, is a good whose winning has not yet brought forth moral laws.

A "necessity" enters morals when it is consciously desired or rejected, pursued or avoided by a group. Foodstuffs and sex objects, clothing, shelter, defense against diseases and enemies, are such necessities. Consider primitive customs and codes: Australian tradition, Aryan sutras, Israelitish commandments, are alike meticulous concerning what to eat and what not to eat, how to secure it and prepare it, in what company to eat and so on. Cannibalism, which is a horror to us, has been a felt vital necessity to more than one ancient people, since it is based on the belief that men are what they eat and that to eat the strong, the great, the wise, is to become great, strong and wise. The belief persists, passing, with the growth of communities in well being and security, through a series of mutations. First, cannibalism as the nourishing of men upon human flesh is replaced by human sacrifice, which is nourishing ghosts and gods on human flesh. Human sacrifice was indeed so common in antiquity that it is a boast of Aristotle that the Greeks no longer practised it. The transformation is completed where the material sacrifice becomes imaginative and ideational; instead of men eating men or gods eating men, men eat gods. The Eucharist is the current descendant in the direct line of the primitive cannibalism. The prescriptive dietary systems of Todas, Jews, Brahmans, Mohammedans, with their clean and unclean foods, exemplify the more positive elaboration of the same process in selecting and defining "right." In free society the necessity has lapsed and diet has become a matter of manners.

Codes deal similarly with the biological crises and conditions of the personal life—birth, puberty, menstruation, cohabitation, marriage and divorce, association with others. They regulate contact and communication between the sexes, between the generations, between the castes, between the outsiders and the insiders.

Dress and decoration, themselves derivatives of the nutrition and sex complexes, also fall under rule: codes prescribe how hair shall be worn; how a person shall be marked and dressed for hunting, fighting, courting, marrying, burying and for contact with ghosts and gods. Except among the military and ecclesiastics such rules have dropped to the level of manners. But practically until the industrial revolution they were momentous moral principles.

Sex rules exhibit analogous conditions and processes. In many quarters morality has become synonymous with a certain prescriptive form of sexual life. Now psychoanalysis has called attention to persistent incestuous trends in family life in the form of the "Oedipus complex." Incestuous practises are still much commoner in Europe and America than many like to recognize, but they are condemned with greater horror than homosexuality, sadism or masochism. Among native tribes in South America and Australia, however, exogamy may be prescriptive, yet incestuous and promiscuous relations are commonplace. Fear of menstrual blood is expressed by tabus not only against cohabitation but against contact with menstruating women. Often a whole sexual economy is postulated upon a presumable danger to the male from the blood of the female of the species.

Consider, again, the status of woman. Anthropologists point to existing matriarchal orders and to the vestigial matriarchies of all societies. For some reason, perhaps the discovery of the role of the father in procreation joined with the feeling of security accompanying the settled routine of an agricultural economy, women and children became valuable farming tools. Instead of being individuals within the undifferentiated community of the tribe they became personal to the adult male. Women thus took on the character of property: sold by the father, bought by the husband, with their functions standardized and limited. As civilizations grew more complex, women ceased to be valued for their skill. Their untouched femininity alone counted. How and when the woman's virginity becomes an asset to the man who marries her and consequently important to her cannot be told. The organic connection between sexuality and religion indicates that the fertility of women and the fertility of earth and beasts were held bound together. Sometimes women became priestesses of the life renewing divinity, with the duty to receive the seed of every man who came to the temple to offer. At other times they became guardians and conservators of the sacred, creative, life giving fire of the hearth and hence might know no man whatsoever. Holy women like the vestal virgins are of a later growth than holy women like the temple prostitutes, the priestesses of Diana, or the Great Mother and the like. The institution of the Vestals registers the fact of women having become property. *Virgo intacta* is a proprietor's conception. In the course of time virginity becomes a rule of

"right" conduct for all women of the western world. Motherhood indeed is absorbed in virginity, and the maiden who became the mother of antique religion is transformed into the mother who stayed maiden of the Christian cult: Mary, Mother of God and Virgin still.

Considering non-human property, the growth, elaboration of, and struggles to abolish property distinctions seem to provide one of the most interesting phases of moral history. Property relations are preeminently the subjects of the most heated moral controversies. Possessions are with difficulty distinguished from personality. Amid the simple native communities of Australia and the Americas the sense of personality extends hardly beyond the skin. Husbandry or hunting may be practised alone or with companions; production of any sort may be private or cooperative; but consumption is always communal. Hunter and husbandman share catch and crop with their fellows. Their tools are personal when employed but communal *in potentia*. The "Indian giver" is one who understands ownership as use; the unused object may be asked back if need arises. In such circumstances private property could hardly be a focus of moral regulation. It enters morals where personality has begun to extend beyond a man's skin, where such extension has become static rather than functional. It is in evidence in agricultural economies where the father figures as the master of the family. First, it seems limited to the winnings of his personal prowess—his women, his children, the immediate work of his hands. Land long remains communal. Its individualization has been intermittent and for the most part incomplete. "Public" has been made "private" and private public, with a marked tendency to recognize the "right" of eminent domain.

One group's virtue, to sum up, can be another group's sin. Obeying the Ten Commandments or following the gospel of Christ or of Marx may be beatitude or turpitude. Rules of right conduct begin in accident and obtain contingently. A perception with little or no objective relation to the vital economy may have a profound emotional one, stirring personality to its depths, so that nuclear drives are reanimated and the perception becomes a focus of simultaneous appetitions and evasions. Or, conversely, a perception inwardly determined by hunger contractions, glandular pressure, circulatory conditions, their ideomotor correlates and the like operates like a magnetic pole whose lines of

force attract some and repel other objects, distributing the former in a definite pattern around their cores. Morals present a fair analogy to such processes, whether they are responses to external stimulation or to action initiated within. Chance behavior forms in their beginnings, emotion fixes them in memory, imposes their repetition and verbalization. The latter refine and polish the original action pattern; the action pattern reawakens the emotion in which it was set off. The initiative perception behind moral responses disappears from remembrance. The responses survive—the action compulsive, the feeling that of conformation to force.

Stated in words, the action is now a "moral law." The generations transmit it, the older infecting the younger with the feeling which the formula sustains. Since the originative force is forgotten, another origin is automatically attributed. And all attributions seem to be summed up in the formula: "It was Father's way"—*mos majorum*. Where societies are complexes of lesser groups, the importance of the fathers seems neutralized. *Mos majorum* ceases to be their way: it becomes a way which an original father of fathers, a king, a god, reveals as his will for man. *Mos majorum* bifurcates into custom and code. The moral code is the will of God. It embodies sanctions—promises of reward and threats of punishment—since its ordinances prescribe behavior forms constantly subject to variation and lapse. Where the code, first imposed and then accepted, is acknowledged by the general sentiment it becomes a community's ideal and expectation, the "spirit" of the people or the times, glorified as "the moral law." In such situations, the consequences of conformity are indifferent. Virtue or morality consists in this conformity; right conduct is not commanded because it is good, it is good because it is commanded. The commandments are made known to a chosen one, an actual or legendary lawgiver—Numa, Moses, Lycurgus, Buddha, Zoroaster, Jesus—who becomes the great hero of the community acknowledging his law. Through him the Lord reveals His will regarding men. The awareness of this law, whether it be unwritten *mos majorum* or written codes as with the Parsis, the Spartans, the Jews, the Christians or the Buddhists becomes the determining component of conscience. The "voice" or the "dictates" of conscience consist in the conflict between the pull or push of a prescription or a tabu and some contrary impulse.

The code is transmitted chiefly by means of

education. Among primitive peoples this is mainly a brief painful indoctrination in the tribal law. More advanced societies also presume that the code must be learned. In none do its obligations bind the admittedly uninstructed. Thus children, at least among savages, are left pretty much alone until their initiation at puberty. Then the code becomes coercive. Moreover, within the general tribal code special sex codes function, so that males and females live under different rules.

The history of morals reveals, however, much variation. Among Christians, especially after the Protestant Reformation, children were indoctrinated at a very early age and the code bound them only a little more strictly after baptism or confirmation than before. The Athenian rule for women contrasted sharply with the Spartan; republican Rome made other requirements than did the Rome of imperial times.

In all societies birth, wealth and position modify the obligatoriness of the code. Thieves have their honor; and presumably *noblesse* obliges only the nobility. Actually, however, *noblesse* carried privileges, not obligations. Thus, while gambling debts were considered "debts of honor" which must be paid, payment for necessities could be deferred with impunity until death; the nobleman hunted, the commoner poached; the nobleman "drank like a gentleman," the commoner "got drunk." Pecuniary times have invented and the moral rule enforces the standards which make debt and gambling alike dishonorable.

Sexual morality provides similar distinctions. The code for females is stricter than the code for males. The woman known to live like a man is *déclassé*; while a man who consorts with prostitutes is accepted everywhere.

Race is a factor. American whites do not expect Negroes to live by their rules of sex or property. White men may consort with Negro females all their lives; a Negro male cohabiting with a white female may be either burned to death to vindicate "the honor of Southern womanhood" or judicially executed with all the pomp and circumstance of legal ritual.

Sometimes religion does not strengthen but relaxes a community's code, as among the Brahmans, where the *ngana yogin* claims freedom from all the rules of caste. Class, profession or vocation relaxes codes. Thus the conduct of artists is allowed a certain looseness and flexibility; and women artists, especially actresses, are conventional objects of pursuit by libidinous

males who can afford to practise the art of love for its own sake. Again "business is business" and has its own morals, which the schools endeavor to offset with "business ethics."

In fact the rule of any code whatever is at no time complete or unchallenged. Variations are sometimes allowed, sometimes assert themselves, sometimes operate in secret but always exist. They are unstable and shifting configurations of many groups, each with its characteristic behavior pattern, which sometimes nullifies and always diverges from the code of the dominant group.

The latter, enforced against continual opposition and variation, is the special charge of the ruling class. The code indeed serves as its major implement of domination among the Australians, where the magisterial old men do what they please while others are punished for breaking the rule. In the nature of things it rarely happens that the guardians of any law do not soon feel themselves somehow above the law. This is why corruption comes to be the traditional attribute of the military, the politicians, the police and the clergy. To every wielder of "lawful" power accrues that "divinity" which "doth hedge a king," which raises him above the law. Since a way of life can be actual only as the habits of the people whose way it is, the preoccupation of those who enforce a way must necessarily center in the habits of enforcement. Codes seem powerful only with the strength of those habits of enforcement and operative only by their action. The enforcers of a code soon acquire a realistic attitude toward the nature, origins and functions of codes. They do not obey what they enforce. Was not the secular spirit first manifest among ecclesiastics themselves?

But whatever the ruling class, the moral code is enforced and invoked in its behalf. Invocation usually becomes prominent when opposing groups with power challenge the dominant mores and the ruling class feels insecure. At such times monitions are heard about the decay of morality and the decadence of civilization.

Opposition usually begins as protest and grows into power. It defines and confirms itself by a contrasting doctrine and discipline of life. Historically all oppositions start with a morality which seems ascetic beside the established ways. Philosophic sects like the Epicureans and stoics, theocratic ones like the Jewish Pharisees, the first Christians in Palestine and elsewhere, oppose a certain strictness of conscience and conduct to the general compromise and tolerance

of the ruling classes of the time. Primitive Christianity was communistic and monastic; Lollards, Cathari, Calvinists, enacted analogous simplifications and prohibitions. The contemporary parallel is the Communists of Russia with their hard discipline, egalitarian poverty and religious adherence to the Communist code. These endure so long as the new code is not secure. The history of every endeavor to set up new morals shows that relaxation follows security. Among the keepers of the code *askesis* expands into a hedonic practise, but upon their subjects it is imposed as heretofore. So in the United States "Americanization" uses the "doctrine of the Declaration of Independence" to impose upon its initiates acquiescence in the supremacy of the ruling classes and their ways. The Russians' "dictatorship of the proletariat" and "proletarianization" are simply candid and unhypocritical applications of the same practise in the Russian scene.

Every moral code depends upon coercion, often unconsciously. On infants and children coercion works by emotional and verbal contamination from adults, who impart their wishes in a moralizing setting of rules variously rationalized. The emotions soon become so overladen with habitual rules that the rules themselves seem intuitive and inevitable, when they are only familiar. Where this has ceased to be the case, as in the modern world, or in Periclean Athens, the codes have either been confronted by alternatives or shaken in authority through catastrophe or experience. Thereupon they receive protective elaboration and are reenforced with secondary agencies created *ad hoc*. Such elaborations and agencies are the courses in "character building" now in vogue in American schools, the rise of the discipline called "social ethics" and the curious "citizenship" courses. Others are the extragovernmental censors: "patriotic" societies, the Ku Klux Klans, and the new creations of the churches. All endeavor to validate codes recognized though not admitted to be shaky.

But the most pervasive sanction for any complex of morals, whether or not codified, is religion. Religion is nearer the primary pattern of the social complex than any other institution. Its sanctions, involving supernatural rewards and punishments, enter early into the consciousness of the young. In the child's experience the God invoked to enforce right conduct consists of the word "God" and the feeling and attitude of the person speaking. For the most part God,

in early life, had been the verbal associate of actually experienced monition, anxiety, repression, hurt or pain. By its use the code is readily made momentous. Orthodox cults thus continue to invest with moral sanctions much that the secular world has reduced to manners. Female fashions, drinking, dancing, gambling, diet, are frequent topics of warning for professional guardsmen of the code. The same practise keeps atheism reprehensible and obscene and sustains the widespread delusion that disbelieving in God and possessing a criminal disposition are synonymous, that without religious sanctions morals must decay.

Enforcement and support of the sanctions of morals call for all the engines of control employed by any power desiring to maintain doctrines favorable to itself. The lapse of such doctrines follows either the rise of more powerful countersanctions or new conditions of existence which alter morals and ultimately create new rationalizations. Thus the mediaevals regarded usury as a more or less immoral practise fit only for Jews and infidels. But when an improvement in mining increased the production of precious metals, the money economy which it made possible moralized usury. Luther allowed, and Calvin, Puritanism's prime lawgiver, wrote a treatise favoring, usury. Here that complex of practises usually described as the morals of early capitalism employed Reformation theology to rationalize and to justify behavior contrary to the traditional code, which was soon made to conform to the strength that its supporters could not overthrow. Practise came first; its conscious formulation as a permitted, even a noble, action followed. The new code was at once the expression of the power and a defiance of the enemies of those who practised it.

Labor saving machinery disturbed the habit patterns of the community in another way. As machinery spread, population took an unprecedented spurt; and a worker counted inversely to the number of his competitors. This led to "labor troubles." These Wesley tried to assuage by a "method" revitalizing the old code of submission and obedience to authority. But he could do so only by altering fundamentally the structure of the ecclesiastical establishment itself, allowing to laymen forbidden ecclesiastical privileges and powers, thus distracting the attention of early British industrial workers from their hard lot. The cause of the evil, however, nullified the cure, and the Methodists are a negligible sect in England. In the setting of the American wil-

domness, however, Methodism served to preserve the traditional code, combining considerable liberty with authority, and Methodists are important in the United States.

Since Wesley inventions have multiplied geometrically, and contacts of diverse moralities in proportion. Every new major invention adds to the environment a new control of behavior, distorting, overlaying and otherwise transforming habits. Every new contact invites the odious comparison. Morals appear so varied and contrary that students freed from the traditional prejudices see morals as habit structures whose value for living is, to say the least, ambiguous. Since these structures frequently interfere with rather than facilitate function morals are seen as growths, like languages; the patterns of neither have any necessary connections with the meanings they communicate. Functional obstruction is attributed particularly to morals of sex and property, and the tendency of theorists is to strip entirely away their mass of secondary and tertiary habit growths. The tendency serves to verbalize the actual attrition and replacement of morals which industry and science are causing. Thus, the sex standards of "purity" and "virginity" for women are lapsing; "marriage" has ceased to be the finality it was. Legal changes are registering the trend toward the equalization of the sexes. The old code degrading women is invoked less and less.

Property habits evince analogous changes. Here the content and character of ownership are so radically altered by the financial and industrial system that the public limitation upon "property rights" grows by leaps and bounds. This applies also to the rights of parents over children. The "sanctity of the family" is cried up the more as the community increasingly takes on parental obligations.

Earthquakes, floods, epidemics, famines, depressions, wars and revolutions relax morals generally and thus set up counter-affirmations of the code. The helpless counter to revolution is canonization of the overthrown code: Russian émigrés are said to observe as a ritual the czarist ways of life, economically futile and no longer valuable as conspicuous consumption. Makers of basic revolutions, such as the Russian or French, may endeavor to ordain a new code. Such a code conflicts directly with both the mores of the residual population and the personal habits of its individual members. The effort to impose it leads simply to withdrawal, psychological and physical. Neither appeals to

the hope of security and the fear of starvation nor to experimental demonstration accomplish much. The emotions mostly energize the old habits; St. Tryphon remains the insecticide preferred over more material poisons. Persistent training and indoctrination only ruffle the surface. While no emergency disrupts the basic life patterns, while primary needs are gratifiable at the level of subsistence, adult morals hardly change. Ten years of Russian effort to establish "scientific, rationalistic morality" leaves the older patterns and sanctions very little altered and has set up new ones equally irrational. Only fundamental innovations in the material environment, new people, new tools and new stuffs generate new habits. Lacking these, even habits shattered by catastrophe come back. At most the innovative codes serve the secure as escapes or entertainment. Both Rousseauism and science so served the eighteenth century aristocrats. By itself alone a new code changes manners, not morals. It sets up a fashion, not a folkway.

Ethics, i.e. philosophies or psychologies of conduct, also define themselves with reference to the situation in which they arise. As produced, a system of ethics utters the temperament of its inventor, expressing his personal reaction to his world. This he makes public. If it becomes vogue it does so for two reasons. The first is the congruity of the author's personal hopes and resentments with the mood of his time. The second is the persuasive skill with which he rationalizes the mood, endowing its loves and hates with an ineffable ground in the nature of things. So Oswald Spengler lays out the cosmic ground for German discontents. So Sigmund Freud rationalizes the changing sex relations due to science and industry. So Karl Marx grounds in an invincible dialectic necessity the aspiration of the disinherited of industrial societies for the fulness of life. So Henri Bergson mollifies the fear of science and discontent with industry which are evinced by partisans of lapsing morals and their sanctions. The systems consist of logical elaborations of special items selected from the aggregate of morals. This aggregate has no unity and no structure. It is a jungle of secondary and tertiary growths of habits, most of which an engineering comprehension of the dynamics of human and cultural survival would strip away and all of which it would rearrange.

Unhappily moralists are persons who take an engineering view of other men's ways of life. To a man his ways are his life: he clings to and

endeavors to preserve them regardless of the cost. A "scientific, rationalistic morality" is thus a contradiction in terms. Morals in their roots, their growth and their sanctions are as irrational as the lives they inform; they are to be rationalized but hardly rendered reasonable.

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See: ETHICS; CUSTOM; FOLKWAYS; CONVENTIONS, SOCIAL; ETIQUETTE; LAW; CONDUCT; CONTROL, SOCIAL; TABU; SANCTION; COERCION; CONFORMITY; PUBLIC OPINION; RELIGION; EDUCATION; HONOR; CHANGE, SOCIAL; EVOLUTION, SOCIAL; INNOVATION; CONSERVATISM.

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MORATORIUM. The desire to protect individuals or communities from the consequences of default or of the collapse of the general credit structure has resulted in the invention of various

devices to postpone the fulfilment of obligations. Most important of these devices is the moratorium, which is a postponement of payment decreed by the state through the medium of the courts or legislation and differing from postponement based on voluntary agreement, such as composition of creditors. Moratoria to relieve individual debtors are called special moratoria—such were the German *Quinquennellen*. A general moratorium is instituted either to relieve particular groups of creditors who have been placed in unfavorable situations, as in the case of the moratorium decreed by St. Louis in favor of the crusaders or of the moratoria enacted during the World War by various American states in favor of persons in military service; or it may be in favor of all debtors in the community in order to preserve the financial structure in times of great stress, as, for example, the English and French moratory legislation during the World War.

Considerable variation exists concerning the types of obligations affected, bills of exchange, mortgages and debts in general, and there is even greater variation in the machinery for enforcing postponement. Certain laws have affected the substance of the obligation, such as those postponing the maturity of a bill of exchange; some have forbidden the institution of suit; others have suspended some procedural incident, such as service of process or execution of judgment; and still others have gone so far as to close the courts during the moratory period. While the typical moratorium is decreed by statute, a peculiar form of judicial moratorium has been developed in the United States by the use of the equity receivership. Both statutory and judicial moratoria have grave defects with regard to their effect on public confidence and because of the difficulty of securing speedy action during a crisis. Substantially similar results have often been achieved by private or semi-public bodies. Closing of stock exchanges for limited periods, suspension of check clearances by clearing houses, agreements among groups of banks not to call loans or to foreclose mortgages, have been utilized. The "standstill agreements" among the foreign creditors of German commercial houses which were concluded during the credit crisis of 1931 constitute a striking international application of such action.

Although in the ancient and mediaeval periods the absence of a complicated credit economy made the moratorium a relatively unimportant device, there is evidence of its use from very

early times. A temporary suspension of private claims in Greece during a war is touched upon in one of the speeches of Demosthenes, and some mention of moratoria is to be found in early Roman sources. The first general moratorium appears to have been that enacted by Justinian in 555 A.D. following the invasion of Italy by the Franks ("Lex quae data est pro debitoribus in Italia et Sicilia" in *Novellae*, Appendix VIII). The code of Justinian provided for the granting of a special five-year moratorium by imperial rescript where a certain number of creditors consented. A misinterpretation of this provision led to the practise during the Middle Ages whereby sovereigns granted special moratoria without the consent of creditors. In France such moratoria were granted in favor of persons indebted to Jews and in favor of crusaders. The practise was abolished by the Ordinances of January, 1560. By the *Code civil* (art. 1244) the courts were permitted to grant individual debtors limited delays for payment. In the German states the granting of moratoria, called "iron letters" or *Quinquennellen*, by sovereigns to particular debtors continued unabated until the end of the eighteenth century. The scandals aroused by the purchase of such respites of payment are mirrored in the proverb *Quinquennellen kommen aus den Höllen*. These special moratoria of the Middle Ages were motivated by private, political or religious purposes rather than by economic considerations and they tended to disrupt rather than to improve business conditions. In the city republics of Italy and Germany the growth of trade led to the use of a moratory device providing temporary delay for hard pressed debtors.

The complex economic system of the nineteenth century could not tolerate the granting of special moratoria by the executive. The practise has become extinct although attenuated forms of judicial special moratoria still continue to exist in the French *Code civil* and in the American equity receivership. On the other hand, the general moratorium has been found to be indispensable during times of crisis. Much moratory legislation was enacted during the Thirty Years' War. Moratoria were decreed for the Holy Roman Empire after the War of the Spanish Succession, in Prussia after the Peace of Tilsit in 1807 and in France in 1870 for bills of exchange. In England they were not used between the period of the Napoleonic wars and 1914. The most widespread resort to this device occurred during the World War, when mora-

toria were decreed in almost all belligerent countries and in many neutral countries both for those in military service and for debtors in general.

It will be seen that general moratoria have been ordered usually in war time. The economic depression which began in 1929 marked a revival of the practise in times of peace. During this period moratoria appeared in various new guises. Thus in Germany during the financial panic in the summer of 1931 limitations were placed on withdrawal of bank deposits; there was a national bank holiday in the United States in 1933. Restriction on foreign exchange or on the export of currency in Germany, Austria, Rumania, Greece and other countries resulted in what were practically moratoria on foreign payments. The collapse of the Kreuger interests in 1932 led to a moratorium in Sweden. Voluntary suspensions of demand for payment by groups of creditors which had the effect of moratoria were common and ranged from the standstill agreements of the foreign creditors of Germany to agreements among groups of American banks and insurance companies not to foreclose farm mortgages. Most striking was the one-year moratorium on intergovernmental debts and reparations adopted at the suggestion of President Hoover in 1931.

In the United States moratory legislation presents a special problem. The Constitution of the United States (art. 1, sect. 10) provides that no state shall pass a law impairing the obligations of contract. This has not prevented the passage of numerous state moratorium acts, but the question of their constitutionality is shrouded in a fog of judicial decisions. Some state courts have attempted to distinguish between the obligation of the contract and the remedy granted by the law. The latter, it has been said, may be postponed or burdened with conditions. Although the United States Supreme Court has held that the remedy is an integral part of the obligation, not every impairment of the remedy can be considered an impairment of the obligation. A review of state moratory legislation indicates the difficulties of the question of constitutionality. Statutes suspending execution or staying proceedings in favor of needy debtors even for a definite period, such as those of Georgia, Virginia, North Carolina and Pennsylvania, have always been held unconstitutional [*Aycock et al. v. Martin et al.*, 37 Ga. 124 (1867)]; *Taylor v. Stearns et al.*, 18 Gratt. (Va.) 244 (1868); *Jacobs v. Smallwood*, 63 N. C. 112

(1869); *Billmeyer v. Evans & Rodenbaugh*, 40 Pa. St. 324 (1861)]. Statutes suspending execution or staying proceedings in favor of persons in military service, such as those of Missouri in 1847, Pennsylvania in 1861 and Iowa in 1862, have been held constitutional, in the early cases on the ground that they merely affected the remedy [*Edmonson v. Ferguson*, 11 Mo. 344 (1848); *Breitenbach v. Bush*, 44 Pa. St. 313 (1863); *McCormick v. Rusch*, 15 Ia. 127 (1863)] and in the cases in regard to moratorium acts passed during the World War on the ground that the legislation was a valid exercise of war powers [*Studt v. Trueblood*, 190 Ia. 1225 (1921); *Strand v. Larson*, 45 N. D. 7 (1920)]. Some state courts (*Breitenbach v. Bush*) have held these moratoria applying to persons in military service to be valid only where the stay was for a definite time; others, like North Dakota in 1918 (*Strand v. Larson*) and Iowa in 1919 (*Studt v. Trueblood*), have held valid statutes suspending proceedings "for the duration of military service." Two important cases indicate that the indefiniteness of a moratorium renders it invalid: a Virginia law staying proceedings against all debtors for duration of war was held invalid by the United States Supreme Court [*Daniels v. Tamey*, 102 U. S. 415 (1880)] and a New York law staying proceedings on certain insurance contracts until a Russian government should be recognized was held invalid by the New York Court of Appeals [*Slisberg v. New York Life Insurance Co.*, 244 N. Y. 482 (1927)]. In contrast the New York emergency rent laws (1920 and 1922) were held valid on the ground of the existence of an emergency. In general it appears that a moratorium act based upon an emergency, limited to a definite time and affecting in terms only the remedy and not the obligation, would be upheld as constitutional.

In 1864 federal moratory legislation was enacted extending the period during which actions already accrued might be initiated. The Soldiers' and Sailors' Civil Relief Act of 1918 was intended to provide extensive protection for those in military service. Its method was mainly to suspend proceedings in the cases involving the rights of sailors and soldiers during their absence. In order to avoid the inflexibility of the state laws much was left to the discretion of the courts. The act, which definitely interfered with contractual obligations as well as with remedies, was considered a valid exercise of the war powers of Congress.

Problems have arisen in connection with the

recognition of moratory legislation relating to bills of exchange by the courts of other states. The English courts recognized the validity of the French moratory legislation of 1870-71 which applied to bills of exchange payable in France [Rouquette v. Overmann and Schou, L. R. 10 Q. B. 525 (1875)]. While there is much conflict, the weight of opinion tends in the direction of recognizing the moratory legislation of the place where an instrument is payable, particularly when it merely postpones the date of protest, but refuses to permit recognition of legislation which purports to affect the maturity of instruments payable in other countries.

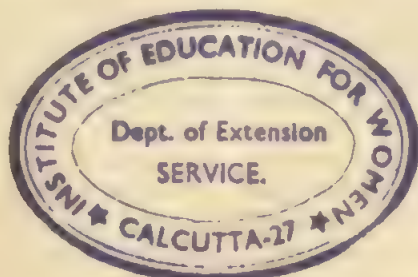
Although the moratorium in the nature of special indulgences to individuals has practically disappeared, the general moratorium has displayed decided powers of survival and growth. A complex economic system carrying a huge load of debt might well collapse under a sudden blow unless some such instrument for permitting a breathing spell were utilized. So far as individuals are concerned, the fact that most persons are both debtors and creditors tends to balance the advantages and disadvantages of laws delaying payment. People and businesses suffer from them relatively to the extent that they are preponderantly creditors, not only because they do not receive payment when due but because the moratorium permits insolvent enterprises to continue and as a result frequently places the creditors in a worse position than if immediate bankruptcy had taken place. The charging of interest during the period of the moratorium and the increased flexibility of modern moratory legislation tend, however, to alleviate gross injustices, and it is doubtful whether creditors would be better off if no moratorium were declared and a general economic debacle occurred. The extensive use of moratoria during the depression which set in in 1929 indicates that unless the economic system reaches a much greater degree of stability than it now possesses,

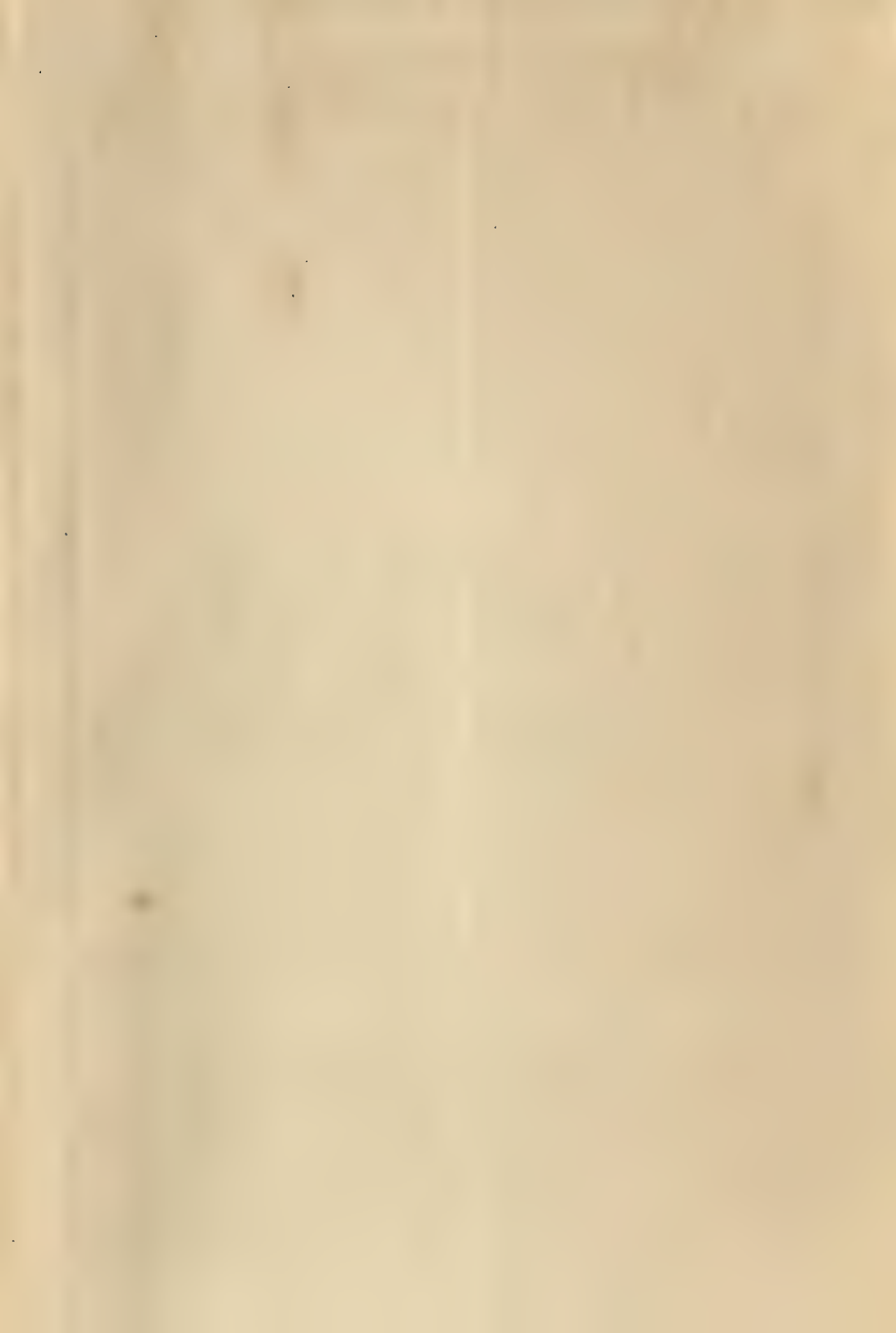
resort to them will continue to be necessary in times of economic stress.

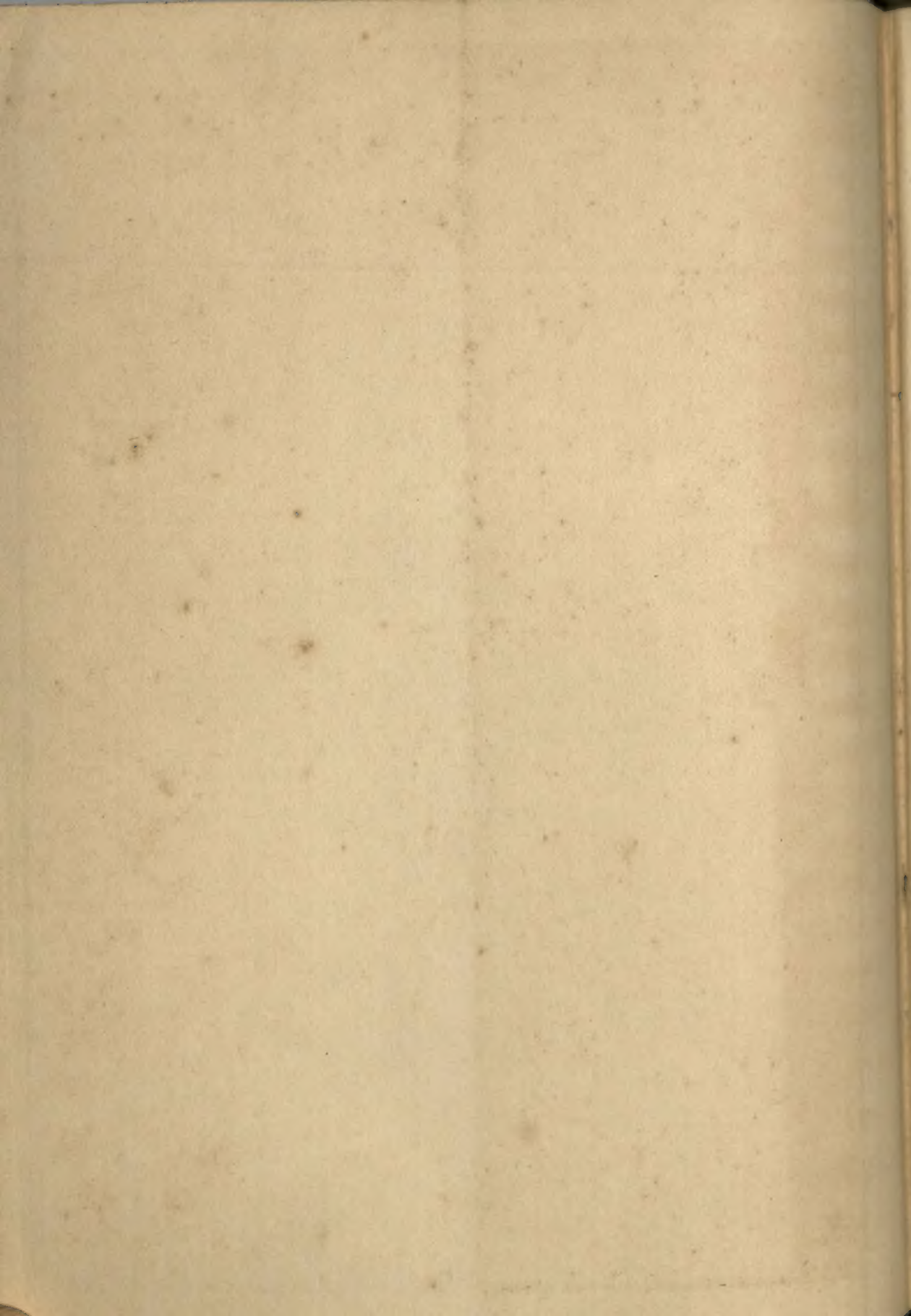
A. H. FELLER

See: DEBT; CREDIT; NEGOTIABLE INSTRUMENTS; CRISES; BUSINESS CYCLES; WAR ECONOMICS; CLEARING HOUSES; STOCK EXCHANGE; REPARATIONS; LOANS, INTERGOVERNMENTAL.

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WHAT THE "ENCYCLOPAEDIA AIMS TO DO

Until comparatively recently all of the social sciences remained in water-tight compartments. The older sciences have had such a habit of regarding phenomena to arrange themselves into groups that each of them has been content with pursuing its own problems. The natural sciences have found enough to do in their respective fields and in their claims to separate existence. At the same time has come, however, when every branch of the social sciences is beginning to realize the many points of contact which human contacts can be studied and that it is undoubtedly better to take to separate them into independent sections.

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